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## **ALIGNMENTS**

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RESULT 2

148681

165 kDa glycophosphoprotein - mouse (fragment)

C;Species: Mus musculus (house mouse)

C;Species: Mus musculus (house mouse)

C;Care: 02-711-1996 #sequence_revision 00-711-1996 #text_change 00-7

C;Care: 02-711-1996 #sequence_revision 00-711-1996 #text_change 00-7

C;Accession: 148681

R;White, M.E.; Hung, M.C.

Oncogene 7, 677-683, 1992

A,Title Cloning and characterization of the mouse new promoter.

* Beference number: 148681, MNID-90008496; PMID:1348855
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Oncogene 7, 677-col, _
A,Title Claning and characterization
A,Reference number: I48681, MUID:922
A,Accession: I48681
A,Status: preliminary; translated for A;Status: preliminary; translated for A;Molecule type: DNA
A:Residues: 1-49 < RES>
A:Residues: 1-49 < RES>
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A;Cross-references: EMBL.X66236, MID.g395186, FIDW.CAA46966.1, FID.g?951C;Genetics.
A,Gene: neu
C;Keywords: ATP; phosphoprotein
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A;Accession: PH1731
A;Molecule type: mRNA
A;Residues: 1:21 <MCH>
A;Residues: 1:21 <MCH>
A;Residues: 1:21 <MCH>
A;Experimental source: B cell
A;Note: the authors translated the codon ACA for residue 13 as Ala C;Superfamily: immunoglobulin V region; immunoglobulin homology
C;Keywords: heterotetramer, immunoglobulin
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C;Species: Mus musculus (house mouse)
C;Date: 24-Feb-1994 #sequence_revision 24 Feb 1994 #text_change 17-Mar-1999
C;Accession: PH1731
R;McHeyzer Williams, M.G., McLean, M.J., Lalor, F.A., Nossal, G.J.V.
J. Exp. Med. 178, 295-307, 1993
A;Title: Antigen-driven B cell differentiation in vivo.
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C.Species Agrabanterion tumefacions
C.Species Agrabanterion tumefacions
C.Sato: 11-Jul 2002 #88 g.eno-_nevision 11-Jan-C000 #text_ 3.10g* 11 Jul 2002
C.Accession: AH2788
E.Word, D.W., Setthal, T.C., Earl, F., Manks, D., Chen, V., Word, G.E., Chen, V., Utuge, G., 111-1, W., Setthal, T.C., Earl, F., Chen, V., Etage, G., 111-1, W., Setty, W., Edgavit, T., Levy, N., Li, M., Science 294, 2017 2023, 2001
A.Authors: Year, H., Tan, V., Biddle, F., Jung, M., Frespan, W., Ferry, M., Cordonal R.
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D., Chen, M., Wood, G.E., Chen, Y., Woo, L. P., Eutyavin, T., Levy, A., Li, M., McClell:

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Light-harvesting protein alpha chain - Estothisched-spira balochlor

Repected antenna pipers ablochloris

C.Species Estothiorhodospira balochloris

C.Sapecies Estothiorhodospira balochloris

C.Sapecies Estothiorhodospira balochloris

C.Sacessin: S23164

F.Wagner-Hiber, F., Prinisheld, F.A., Rissig, T., Stack, S., Suter,

Eur J. Birchem 205, 917-925, 1992

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A.Residues: 1-65 cMaG>

C.Supeciamily light-harvesting protein alpha chain

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A;Molecule type: DNA
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Anad. Sci. C.C.A. 97, 12:74-1:1191, 2:40
B.L., S., Bariels, V.C., Leonis, F.E., Free, A.C., Ebberle, E., Euwe, T.M., Dianome sequence of Halobacterium species NRC-1.

Lunber Araiso, MCC 20:04183, EMID:11016950
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hyporhotical protein Y1031 - Yersinia postis plasmid pM
C;Species: Yersinia pestis
C;Species: 20-Sep-1000 #**ex
C;Species: T14724; T15006
R;Hu, P : Elliott, T : MoTT-ajy, P ; Sh whickki, E ; Ga
submitted to the EMBL Data Tibrary, March 1000
A;Reference number: Z181C8
A;Accession: T14724
A;Residues: 1-76 <HUP>
A;Cross-references: FMPL AFOS3047, MID:g2304C296, FID g2
R;Lindler, L.E.; Plano, G V ; Burland, V ; Mayhew, G F
Infect. Immun. 66, 5731-5742, 1998
A;Title: Complete DNA sequence and detailed analysis of
A;Reference number: Z18268; MUID:00043809; PMID:08263499
A;Reference number: Z18268; MUID:00043809; PMID:08263499
A;Residues: 1 T6 / LINS
A;Cross-references: EMPL:AFOS3611, MID g3883003, PID g3
C;Genetics:
A;Gene- Y1001
A;Genome: plasmid pMF1
C; Accession: S08449
R; Renaudin, J.; Aullo, P.; Vignault, J.C.; Bove, J.M.
Nucleic Acids Pes 18, 1293, 1990
A; Title: Complete nucleotide sequence of the genome of Spi A; Reference number: S08447; MITID: 90206799; pMID:2320423
A; Accession: S08449
A; Status: translation not shown
A; Molecule type: DNA
A; Residues: 1-78 < REN>
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A;Pesidues: 1-73 /PUP>
A;Cross-references: GB:ABGGRRRR; FII
A;Experimental source: strain C58 (1
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C:Species: spiroplasma virus 1, SpV1
C:Date: 30-, nn-1991 #sequence_revision 30-,
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RESULT 10
A64750
A64750
C; Species: Escherichia coli
C; Species: Escherichia coli
C; Date: 12-Sep-1997 #sequence_revision 17-Sep-1997 #text_change 01-C; Accession: A64750
R; Rlattner, F R; Plunkett III, G; Rloch, C A; Perna, N T; Rorl, A.; Rose, D.J.; Mau, B.; Shao, Y.
Science 277, 1453-1462, 1997
A; Title: The complete genome sequence of Escherichia coli K-12. A, peference number: A64720; MUID:07426617; pMID:07426617; PMID:074266177; PMID:07426617; PM
                                                                                                                                                                                                                                                                                   R;Goodner, B; Hi
A.; Liu, F., Wcl
Science 294, 2323
                                                                                                                                                                                                                                                                                                                                     RESULT 11
A97568
A97568
C;Species: Agrobacterium tumefaciens
C;Species: Agrobacterium tumefaciens
C,Date. 30-Sep-2001 #sequence_revision 30 contacted agrobacterium tumefaciens
C-Accession: A97568
C-Accession: A97568
 A;Gene: AGR
A;Map positi
                                                       A; Cross-refe
C; Genetics:
                                                                                                               A,Status prelimi
A;Molecule type:
A;Residnes 1-83
                                                                                                                                                                A;Reference number: A:
A;Accession: A97568
A,Status: preliminary
                                                                                                                                                                                                                                                               A; Title: Genome
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| Wollam, C., All
| 2323-2328, 2001
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97 #seguence_revision 17-Sep-1997 #text_change 01-Mar 2002
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   chromosome
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Pred. No. 4.1e+02;
3, Mismatches C, Indols
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2; Mismatches 0;
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conserved hypothetical proteir C; Species: Escherichia coli 7,5ate 03-Fec-1999 #sequence C; Accession: T42185 F:Burland, V.; Shao, Y., Ferna
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A97359, PMID:11743194
   Ferna,
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                        _rewision 6%-bec-1999 #text_change 6%-Dec-1999
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H
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                                                      - Escherichia coli plasmid p0157
   Flunkett
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4.3e+02;
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   Sofia,
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   Blattmer,
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RESULT 14

837509

Ig kappa chain V region (V-kappa 3) - human (fragment)

C;Species: Homo sapiens (man)

C;Species: 06-Jan-1995 #coquence_revision 06 Jan 1995 #text_change C3

C;Accession: 837509

R;Klein, U; Kueppars, R.; Rajewsky, K.

submitted to the EMBL Data Library, September 1993

A;Description: Human IgM(+)IgD(+) cells, the major R cell subset in A;Reference number: 837501

A;Reference number: 837501

A;Accession: 837509

A;Accession: 837509

A;Residues: 1-92 <KLE>

A;Clube-references: EMBL: Z1600; NID:g40569; FlDN:CAAs1356.1; PlD:C;Cuperfamily. immuneglebulin V region, immuneglobulin homology

C;Guperfamily: immuneglebulin V region, immuneglobulin
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H86753
prophage p12 protein 25 [imported] - Lactococcus lactis sub:
C;Species: Lactococcus lactis subsp. lactis
C;Species: Lactococcus lactis subsp. lactis
C;Accession: H86753
R;Bullutin, A., Windret, F., Marguence 13:Mar 2001 #text_che
Genome Res. 11, 731-753, 2001
A;Title: The complete gonome sequence of the lactic acid ha
A;Reference number: A86625; MUID:21235186; PMID:11337471
A;Accession: H86753
A;Accession: H86753
A;Residues: 1-87 <STO>
A;Cross-references. Gb.AE005176, 111.glz723903, 1110.AAK051
A;Experimental source: strain IL1403
C;Genetics:
A;Gene: p1225
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A;Title: The complete TVA sequence in analysis of the A;Reference number: 727058; MUID:98391744; PMID:972264

A;Accession: T42185

A;Constitution of the complete type: DNA

A;Recidue. 1 96 PUE:
A;Cross-references: EMPI apor4612, PIDM AACTOICS:
C;Genetics:
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J. Gon. Virol. 73, 1709-1715, 1992

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## SUMMARIES

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X MCBL TaxID-36802;

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RP SEQUENCE FROM N.A.

RC TISSUE.Muscle;

RX MEDLINE 95245091; FubMod 7619817;

RA Barchan D., Ovadia M., Kochva E., Fuchs S.;

"The binding site of the micotinic acetylcholine receptor in animal species resistant to alpha-bungarotoxin.";

RI Species resistant to alpha-bungarotoxin.";

RI Siochemistry 34:9172-9176(1995).

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15 JUN 2002 (Rel. 41, Last annotation update)
Acetyloholine receptor protein, alpha chain (Fragment).
CHRNAL
Crodidura ruscula (White Loothed shrew).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Insectivora, Soricidae, Crodidurinae; Crodidura.
MCBI_TaxID_36802;
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SEQUENCE - 79 AA, 3014 MW, 61455749721A234A CRC64;
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AP NCBL_Taxi.

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AP SEQUENCE FROM N.A.

RC TISSUE=Muscle;

MEDLINE=95345091; PubMod=7619817;

RX MEDLINE=95345091; PubMod=7619
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01-OrT-1996 (Pel 34, Last sequence update)
15-JUN 2000 (Pel 41, Last annotation update)
Acetylcholine receptor protein, alpha chain (CHRNA)
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Eukaryota, Metaroa, Chordata, (
Mammalia, Eutheria, Carnivora,
                                                                                                                                                                                                                                                     Transmembrane.
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SUBJUILLIAB LOCATION: Integral membrane protein (By similarity) SIMILARITY: BELONGS TO THE LIGAND-GATED IONIC CHANNEL FAMILY.
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STRAIN=K12 / MG1655;
MEDLINE=97426617; Pub:
Blattner F F , Flunke
Piley M , Collado-Vid
Sizz
MEDLINE=
Himmelreich R
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EcoGene; EG13309;
Hypothetical prote
SEQUENCE 90 AA,
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P75147;
16-0CT-2001
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Unpublished obj
-'- SIMILAPITY
'- CAUTION: TO
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YPJI OP R2641
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Bacteria, Fi
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SEQUENCE FROM N.A.
STRAIN ATCC 19342 / M119,
MEDLINE=97105885; PubMed=8948633;
MEDLINE=97105885; PubMed=8948633;
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                                                                                                                                                                                                                                                                                                       Hypothetical MFN 650 OF MF
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Escherichia.
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protein ypjI.
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104;
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IN POSITION 60 AND TWO IN FRAME STOP CODONS HAD TO BE
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Homo Sapies (Huyman)

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Mammaria; Eutheria; Primates, Cataribini; Hominidae; Homo.

Macchine, 2000 N.A.

SEQUENCE EROW N.A.

MEDLIME, 2000 TOTA, F.F.W.) 2019551.

MA Doeffen Tota W. Thippal F. H., van den Heurel L., Calaribe M.,

MEDLIME, 2000 TOTA, T. W. Thippal F. H., van den Heurel L., Calaribe M.,

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FOCC HABIN STANDARD; PRT; 106 AA.

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MEDLINE-87260937; PubMed-3037534;
Laddaga F A , Thi L., Misra T F , Silver S.;
Laddaga F A , Thi L., Misra T F , Silver S.;
"Mublectide sequence and expression of the mercurial reconvent from Staphylococcus aureus placmid pi258.";
proc. Natl Acad Sci U.S A 84-5106-5110(1987).
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Wilson M.R., Middle
"Immunoglobulin hea
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Staphylococcus aureus.
Plasmid pi258.
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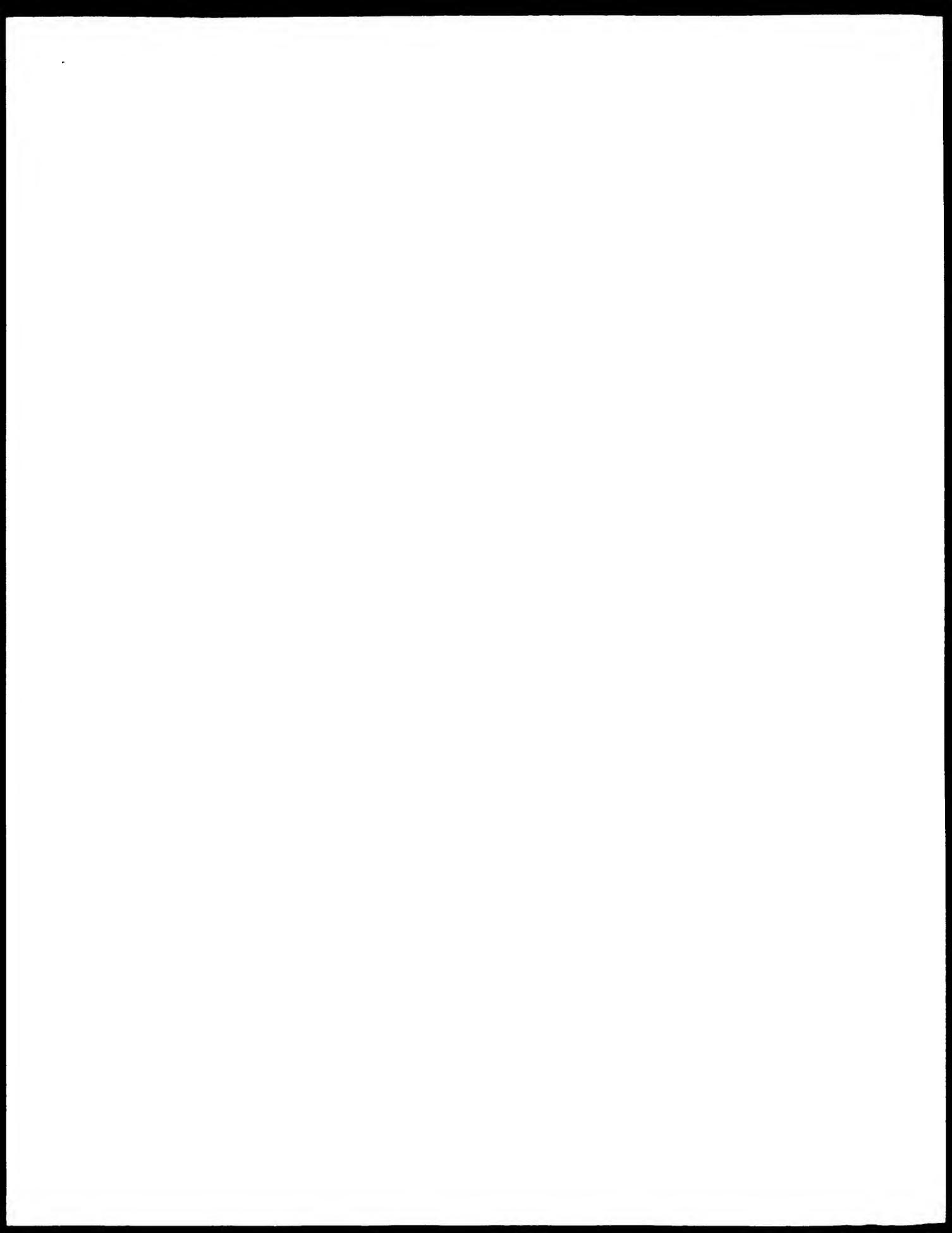
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Hypothetical protein; Complete proteome.
SEQUENCE 138 AA; 15763 MW; F52380D428F42709 CRC64;
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Pucheic Acids Res. 24:4420-4449(1996).
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SEQUENCE FROM N.A.
TISSUE=BLOOD;
Das P., Tiwari G., Garg L.C.;
"Characterisation of lysozyme encoding gene promoter in Bubalus bubalis.";
submitted (MAP-1998) to the EMPL/GenBank/DDBJ databases.
EMBL; AJ225012; CAA12342.1; -.
NON TER 28 28
SEQUENCE 29 AA; 3160 MW; PRCESFSAD7DDB79D CPC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lysozyme (Fragment).
Bubalus bubalis (Domestic water buffalo).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Futeleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
Bovidae; Bovinae; Bubalus.
NCBI_TaxID-89462;
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.4 01-NOV-1996 (TrEMBLiel. 01, Last sequence up on-MAR-2002 (TrEMBLiel. 20, Last sequence up on-MAR-2002 (TrEMBLiel. 20, Last annotation os Rattus norvegious (Rat).

.5 Rattus norvegious (Rat).

.6 Eukaryota; Metazoa; Chordata; Craniata; Ver Mommalia, Eutheria, 8-4651, 4711; juith;

.7 NCBI_TaxID=10116;
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Mitochondrion.
Metarra, M-17:277, Gamesogastropoda; Littorinoidea; Littorinoidea; Littorinoidea; Littorinoidea; LNOBI_TaxID-31220;
(1)
SEQUENCE FROM N.A.
MUIAN F., FULAN Alvaror E.,
Submitted (SEP-2001) to the EMBI EMBI, AF416614; EARITAB12.1; -.
EMBI, AF416615; AALITAB12.1; -.
Ffam; PF02790; COX2_TM; I.
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Y., M'Panli M., M'Pele F., Harada
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AC Q9NRCO;
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EXECUTE SCORNER, Fully M.-C.;

MEDIME SCORNER, Fully M.-C.;

White M.K.-A., Hung M.-C.;

"Cloring and characterhoation of the mouse new promoter.";

Local Secretary of the second in The Color of the mouse new promoter.";

CC -1- CATALITIC ACTIVATION. THE I MEMBARIE EXCIPIN.

CC -1- SIMILARITY. EQUIVALENT TO HUMAN CORD B. Z/HER.2.

CC -1- SIMILARITY. BELONGS TO THE EGF RECEPTOR FAMILY.

EMBL, MCLICALL, CAMACUCLL; -.

WHILL MCLICALL, Exhlu.

Transmembrane; Glycopictein; Puplication; Receptor; Transferase;

TYLUSIES PAULSIL kinase, ATP binding, Phushurphurphation, Considere.

TO NON_TER 49

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TO NON_TER CRUSH BOLE MW; EsbesUsclebbAs CRUSA;
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Q08615;
Q08615;
Q1-NOV-1996 (TrEMBLrel. 01, Created)
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Eukaryota; Motazoa; Chordata; Crunista; Vertebrata; Euteleostomi;
Manmalia; Eutherla; Rodentia; Sciurognathi, Muridae, Murinae; Mus
NCBI_TaxID=10090;
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EMBL; M61004; AAA41686.1; -.
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Hung M.C.
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3; Mismatches 0;
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Prod. Mo. 4.9c+92,
3, Mismatches 0;
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A Simpson A. I. G. Peinach F. C. Arrya T.E., Baja G.S., Byrisra C.S.,

A Alvarenga P., Alves L.M. C., Arrya T.E., Baja G.S., Byrisra C.S.,

A Alvarenga P., Alves L.M. C., Arrya T.E., Baja G.S., Byrisra C.S.,

A Alvarenga P., Alves L.M. C., Arrya T.E., Baja G.S., Byrisra C.S.,

A Alvarenga P., Alves L.M. C., Arrya T.E., Baja G.S., Byrisra C.S.,

A Alvarenga P., Alves L.M. C., Arrya T.E., Baja G.S., Byrisnes M.P.,

A Colling M.H., Bonachorsi F.D., Bordin S., Bove I.M., Briones M.P.,

A Colling M.H., Bonachorsi F.D., Camaryo L.E.A., Colling M.P., Costa Meto G.M.,

A Franca T.S., Franca S.C., Franca M.D., Borcona C., El Dorry H.,

A Franca T.S., Franca S.C., Franca M.D., Borcona C., El Dorry H.,

A Franca T.S., Franca S.C., Franca M.H.S., Comes S.L., Oriber A.,

A Colling M. J., Colling M. A., Comes S.L., Oriber A.,

A Krieger I.E., Kuraman E.E., Laigrer F., Lambais M.P., Leite L.C.,

A Krieger I.E., Kuraman E.E., Laigrer F., Lambais M.P., Leite L.C.,

A Krieger I.E., Kuraman E.E., Laigrer F., Lambais M.P., Leite L.C.,

A Krieger I.E., Kuraman E.E., Laigrer F., Lambais M.P., Leite L.C.,

A Krieger I.E., Martino E.A.L., Martins E.M. F., Marino C.L.,

A Machado M.A., Madeira A.M., Martins E.M. F., Marino C.L.,

A Manna A., Martino E.A.L., Martins E.M. F., Martsykyma A.Y.,

A Manna A., Ur., Nobreda F.G., Nunes I.P., Oliveira M.A.,

A C., Martino E.A.G., Podrigues V., Ae Posa A.T.M.,

A Derbita G.A.G., Podrigues V., Ae Posa A.T.M.,

A Derbita G.A.G., Podrigues V., Ae Posa A.T.M.,

A C., Martino E.A., G., Podrigues V., Ae Posa A.T.M.,

A C., Martino E.M., Martino E.M., Martino C., Nunes I.P., Oliveira M.A.,

A Derbita G.A.G., Podrigues V., Ae Posa A.T.M.,

A C., Martino E.M., Martino E.M., Martino C., Martino E.M.,

A C., Martino E.M., Martino E.M., Martino C., Nunes I.P., Oliveira M.A.,

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Xylella fastidiosa. Protectaria, Protectaria Xylella.

Xylella.

NCBI_TaxID=2371;
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FAM4Al.
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Q9PH20;
Q1-QTT-ZGGG (TrEMMLrel 15, Created)
01-QCT-2000 (TrEMBLrel 15, Last sequence update)
01-JHN-2002 (TrEMBLrel 21, Last annotation update)
Hypothetical protoin Xf0126
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EMBL; AF234886; AAF85949.1; -.
NON_TER 50 50
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Mammalia; Eutheria;
NCBI_TaxID-9606;
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Pent J B , Herbrick J.A., Gurling H
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SPECIES-E.coli; STI
MEDLINE-98:19885; [
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9661-ACM.10
9661-ACM.10
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Nature 406:151:159(2000).
EMPI; AE003866; AAF82939.1; -.
InterPro; IPP001230; Prenyl site
PROSITE; PS00294; PRENYLATION, UNKNOWN_1.
Hypothetical protein; Complete proteome
SEQUENCE -9 AA, 7378 MW; EECD70F-107-07-00F
                                                                                                                                                                                                                                           SPECIES=E coli 0157·H7; STRAIN=0157·H7 / EDIGGG / ATCC 700927;

MEDLINE=21074935; PubMed=11206551;

Perna N.T., Plunkett G. III, Purland V., Mau B., Glasner J.D.,

Pese D.J., Mayhew G.F., Evans P.S., Gregor J., Kirkpatrick H.A.,

Posfai G., Hackett J., Klink S., Boutin A., Shao Y., Miller L.,

Crotbeck E.J., Davis N.W., Lim A., Dimalanta E.T., Potamousis K.,

Apodaca J., Anantharaman T.S., Lin J., Yen G., Schwartz P.C.,

Welch P A , Blattner F P;

"Tenome sequence of enterchaemorrhagic Froherichia coli 0157·H7."

Nature 100.500 537/2001
                                                                                                                                                                                                                                                                                                                                      SEQUENCE F
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MPDLINE-98119885; PubMed-9677266;
P=rna N T , Mayhew G F , Posfai G , Fllistt G , Donnenberg M.S.,
Raper J B , Rlattner F P ;
"Molecular evolution of a pathogenicity island from enterchemorrhagic escherichia coli O157:H7.";
Tofect Immun 66-3810-3817(1998).
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Escherichia coli C157.H7.
Bacteria; Proteobacteria; gamma subdivision; Enterobacteriaceae;
Escherichia.
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OL-MAR-2002 (TrEMBirel, 20, Created)

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Hypother-1001 (TrEMBirel, 20, Last segmenc);

Montalia, Entherina, Obordata, Craniata, Vertebrata, Enthermalia, Entherinalia, Entherinalia, Entherinalia, Entherinalia, Entherinalia, Entherinalia, Entherinalia, Entherinalia, Enthermalia, Entherma
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OU-NOV-1996 (TREMBLIRE). O1, Created)

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TO 2960.

Mycobacterium leprae.

Mycobacterium leprae.

Bacteria; Firmicutes, Actinobacteria, Actinobacteridae;

N NOBACTERIA; O1, A. A. A. A. A. A. B. A. A. A. B. A. A. A. A. B. A. A. A. B. A. A. A. B. A. A. B. A. A. A. B. A. A. A. B. A. B.
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R. EMBL; AF053947; AAC13243.1; -.
R. EMBL; AF074611; AAC82749.1; -.
R. EMBL; AL117211; CAB55242.1; -.
R. Hypothetical protein; Plasmid; Complete proteome.
SEQUENCE 75 AA; REGT MW; TEF444917755036PB CPC64;
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MEDLINE-99043898; PubMed-9826348;
MEDLINE-99043899; PubMed-9826348;
MEDLINE-9904389; PubMed-9826389;
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O1-MAY-2000 (TrEMBLrel. 13, Cr

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Hypothetical 9.1 kDa protein.

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MEDLINE=98422474; PubMed=9748454;
Hu P., Elliott J., McCready P., Skowronski F., Ga
Kobayashi A., Brubaker R.R., Gardia E.;
"Structural organization of virulence-associated
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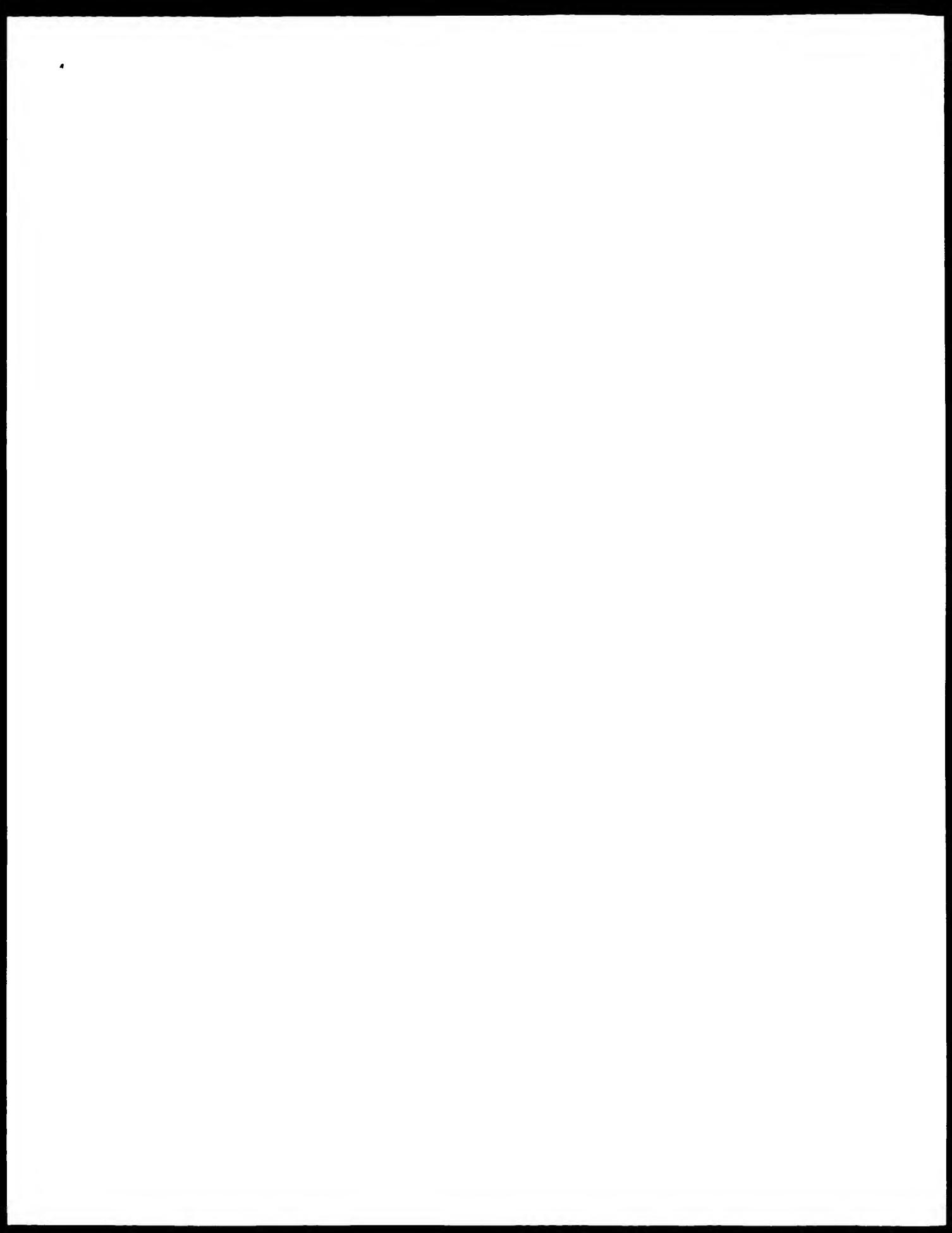
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Manwaring N.P., Skurray R.A., Firth N.;
"Muclectide sequence of the F plasmid leading region.";
Plasmid 41:219:225(1999).
EMBL; AF106329; AAD47189.1; -.
Hypothetical protein; Plasmid.
SEQUENCE 77 AA; 9089 MW, 38145FF01578977A CAC64;
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PT Peptides binding to
pr and inhibiting cell
PT cancer
              binding to the DNA binding domain of transcription factor R2F
Fiting cell cycle progression, useful for the treatment of
                                                                                             Kontermann RE,
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1 the artivation of transcription by EDF 1/DP 1 between EDF and DP 1.

may also be used for indusing appreciation and/or cell cycle arrest in a cell, particularly for treatment of cancer or other proliferative disorders such as psoriasis and restenosis.
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                                                                   Peptides which bind to the DNA binding domain of transcription factor E2F and inhibit cell cycle progression may be useful as research against to investigate the interaction between E2F and DF 1 or the activation of transmiption by E2F 1/DF 1 herer direct They may also be used for inducing apoptosis and/or cell cycle arrest in a cell, particularly for treatment of cancer or their proliferation disorders such as psoriasis and restenosis.
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teA : Po-putor; human; lyst-plasephated in a vid; i-adyl-glyderol d-phosphate; how vit; firelit; vitin, list how, via distribution of its proliferation, skin; physical abnormality, behavioural abnormality, dell proliferation, skin; neurite retraction, platelet aggregation, smooth muscle contraction;
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RESULT 5
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 AAY05493 standard; Protein;
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identify (ant)
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                                                                                      Peptides which bind to the DNA binding domain of transcription factor E2F and inhibit cell cycle progression may be useful as research agents to investigate the interaction between E2F and DP 1 or the activation of transcription by E2F 1/DP-1 heterodimers. They may also be used for inducing apoptosis and/or cell cycle arrest in a cell, particularly for treatment of cancer or other proliferative
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The peptides bind pref to E-selectin but may also bind L- or P-selectin, and can be used to treat conditions mediated by E-selectin, c.g. inflammatory conditions. The peptides have strong affinity for the selectin receptors and inhibit the binding of the sialyl lewis (Sterk) part of cell surface glycoproteins to E-selectin. The peptide are small, generally less than 2 PB, have an icco of up to peptide are against binding of HL60 cells to ELAM 1, have one or more peptide are or NHCONH linkages where E = H or a lower alkyl and E6 = a lower alkyl. The peptides may also have substituted N- and C-termini e.g. "ON (R6), substituted N- and C-termini e.g.
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CC E-selectin, e.g. inflammatory conditions. They can also be used for
CC diagnostic purposes, a g for identifying the vascular site of E-selectin
CC in vivo or can be coupled to anti-inflammatory or other drugs.

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/cgn2_6/prodata/1/paa/TS57_NEW_COMB_pep:*
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PCT US02:32727 5526

US-10-057-498-5526

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4041, A	4-14:154;	FUE DO 134 0000 404	æ	٠	٤.	رد <u>خ</u>
15180,	Segmentes	US-10-057-498-151	79	٠	4	U)
15180, A	atto:Log	ויי חת חדם פני ובן	10		1>	,,
15180, A	autantos	POT 11802 32727 15	70		4	31
24738, A	ablactions	115-10-057-498-2477	74		.4	30
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24738,	Sequence	PCT US02-32727 24	74	66.7	4.	00

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/ Sequence 394, Application US/10225567A

Sequence 394, Application US/10225567A

/ Sequence 394, Application US/10225567A

/ Sequence 394, Application US/10225567A

/ Separal Information
/ Applicant: LifeSpan Biosciences
/ Applicant: Brown, Joseph P.
/ Applicant: Burmer, Glenna C.
/ Applicant: Burmer, Glenna C.
/ Applicant: Househ, Christine L.
/ TITLE CF INVENTION ANTICENTO FEBRUARIES AND ANTICENTION FILE PEFERENCE: 1920-4-4

/ FILE PEFERENCE: 1920-4-4

/ FILE PEFERENCE: 1920-4-4

/ FILE PEFERENCE: 1920-4-4

/ CURRENT FILING DATE: 2001 12-19

/ FRICE APPLICATION NUMBER: 50/257,144

/ FRICE APPLICATION NUMBE
PESULT 2
PCT US02:34021-373
; Sequence 373, Application PC/TUS0234021
; Sequence 373, Application PC/TUS0234021
; GENERAL INFORMATION:
TITLE OF INVENTION: TAPGET SPECIFIC SUFFRING ARE IT
FILE PEFERENCE: 2598-4009PC
; CUPPENT APPLICATION INMREF: PCT/US11/34021
; CUPPENT FILING DATE: 2002 10:24
; PRIOR FILING DATE: 2002 10:24
; NUMBER OF SEQ ID NOS: 537
; SOFTWARE: Patentin version 3:1
; SEQ ID NO 373
; LENGTH: 20
; TYPE: PRT
; OPGANISM Eschericia coli
; FEATURE:
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0, Mismatches
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Sequence 13934, Application US/102031384

Sequence 13934, Application US/102031384

GENERAL INFORMATION.

APPLICANT: Molecular Dynamics, Inc.

APPLICANT: Each, Stails and Applicant Each, Stails and Applicant: Each, Stails and Applicant: Chen, Wensheng

TITLE CF INTENTION. ANALYSIS OF GENE EXPRESSION I

TITLE CF INVENTION. HUMAN GENOME EERIVED CINGLE EX

TITLE REFERENCE: PB 0004 WO 8

CURRENT FILING DATE: 2002-08-02

PRIOR FILING DATE: US 60/180,312

PRIOR FILING DATE: US 60/180,000

PRIOR APPLICATION NUMBER. US 63/600,400

PRIOR APPLICATION NUMBER. US 63/600

PRIOR APPLICATION NUMBER. US 6
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GENERAL INFORMATION:
APPLICANT: DGI BioTechnologies, Inc.
TITLE OF INVENTION. TARGET SEECIFIC SCREENING AN
FILE REFERENCE: 2598-4009PC
CURRENT APPLICATION NUMBER: POT/TEOP/34021
CURRENT FILING DATE: 2002 10 24
PRIOR APPLICATION NUMBER: 60/747, 171
PRIOR FILING DATE: 2001-10 24
NUMBER OF SEC ID MOS: 537
SOFTWARE: Patentin version 3.1
SEC ID NO 422
LENGTH: 20
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OTHER INCURMATION: VEG
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ORGANISM: Eschericia coli
FEATURE:

NAME/KEY: MISC FEATURE

OTHER INFORMATION: VEGERE:
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E INFORMATION:
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; SEQ ID NO 5526
; LENGTH: 52
; TYPE: PRT
; CHGANISM: Propioni a
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. OTHER INFORMATION:

US-10-203-138A-13934
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APPLICANT: Ga
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TITLE OF INVENT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
CTHER INFORMATION
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CRGAMISM: Homo capiens
FRATURE:
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LICANT: Mitcham, Jennifer

SKEIKY, Tasir

LICANT: Skeiky, Tasir

LICANT: Persing, David

LICANT: Malsonneave, Jean

LICANT: Malsonneave, Jean

LICANT: Wang, Siging

LICANT: Jen, Shyian

LICANT: Lodes, Michael

LICANT: Jones, Robert

LICANT: Jones, Robert

LICANT: Barth, Brenda
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Mitcham, Jennifer Cheiry, Yasir Persing, David Shatia, Ajay Maistnneuve, Jean Zhang, Yanni Wang, Diging Lea, Shyian Ludes, Michael Benson, Darin Jones, Robert
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Pred. No. 1.4e+02;
0; Mismatches 0; Indels
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Sequence 5526, Application US/10087498
GENERAL INFORMATION:
APPLICANT: Mitcham, Jennifer
APPLICANT: Skeiky, Yasir
APPLICANT: Persing, David
TITLE OF INVENTION Compositions and Market Current Application Number. US/10/057,4
CURRENT APPLICATION Number. US/10/057,4
CURRENT FILING DATE: 2001 04 20
NUMBER OF SEQ ID NOS: 29212
SEQ ID NO 5626
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US-10-057-498-5526
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US-09-978-825-5526
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APPLICANT: Douglass, John
TITLE OF INVENTION Compositions at
FILE REFERENCE: 210121.51461
CURRENT APPLICATION NUMBER: US/09/CURPENT FILING DATE 2003.01.20
NUMBER OF SEQ ID NOS: 30992
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Best I
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GENERAL INFORMATION:
APPLICANT: Mitcham, Jennifer
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Best Local
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APPLICANT:
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30 ID NO 5526
LENGTH: 52
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Lodes, Michael
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Skeiky, Yasir
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Zhang, i...
ma Siqing
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Barth, Brenda
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Phatia, Ajay
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Sequence 7189, Application U3/10057498
GENERAL INFORMATION:
APPLICANT: Mitcham, Jennifer
APPLICANT: Skeiky, Yasir
APPLICANT: Persing, David
TITLE OF INVENTION Compositions and Mathods for FILE REFERENCE: 210121.514
CURRENT APPLICATION NUMBER: US/10/057,498
CURRENT FILING DATE: 2001 04 20
NUMBER OF SEQ ID NO 7189
LENGTH: 56
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Zhang, Yanni
APPLICANT: Wang, Siqing
APPLICANT: Jen, Shyian
APPLICANT: Lodes, Michael
APPLICANT: Lodes, Michael
APPLICANT: Benson, Darin
APPLICANT: Genter, Darrick
APPLICANT: Barth, Brenda
APPLICANT: Bouglass, John
TITLE OF INVENTION Compositions and Marth description
FILE REFERENCE, 210121.514C1
CUERENT APPLICATION NUMBER, US/09/378,825
CURRENT FILING DATE, 2003-01-29
NUMBER OF SEQ ID NOS: 30992
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Sequence 7189, Application US/09978825
GENERAL INFORMATION:
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Best Local .
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SEQ ID NO 7189
LENGTH: 56
TYPE: PRT
ORGANISM, Frop
09-978-825-7189
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Best Local
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LENGTH: 56
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larity 100 0%,
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PCT-US02 32727-11626

PCT-US02 32727-11626

Sequence 11626, Application PC/TUS0232727

GENERAL INFORMATION:

APPLICANT: Mitcham, Jennifer

APPLICANT: Persing, David

APPLICANT: Bhatia, Ajay

APPLICANT: Maisoncourc, Jean Franceis

APPLICANT: Lang, Vanni

APPLICANT: John, Jijin

APPLICANT: John, Jijin

APPLICANT: John, John

APPLICANT: Johns, Mithael

APPLICANT: Johns, Mithael

APPLICANT: Johns, Darrick

APPLICANT: Dauglass, John

TITLE OF INVENTION Compositions and Mathael

APPLICANT: Douglass, John

CORRENT APPLICATION NUMBER: PCT/US02/32727

COURSENT FILING DATE: 2002-10-11

NUMBER OF SEQ ID NOS. 30992

SEQ ID NO 11626

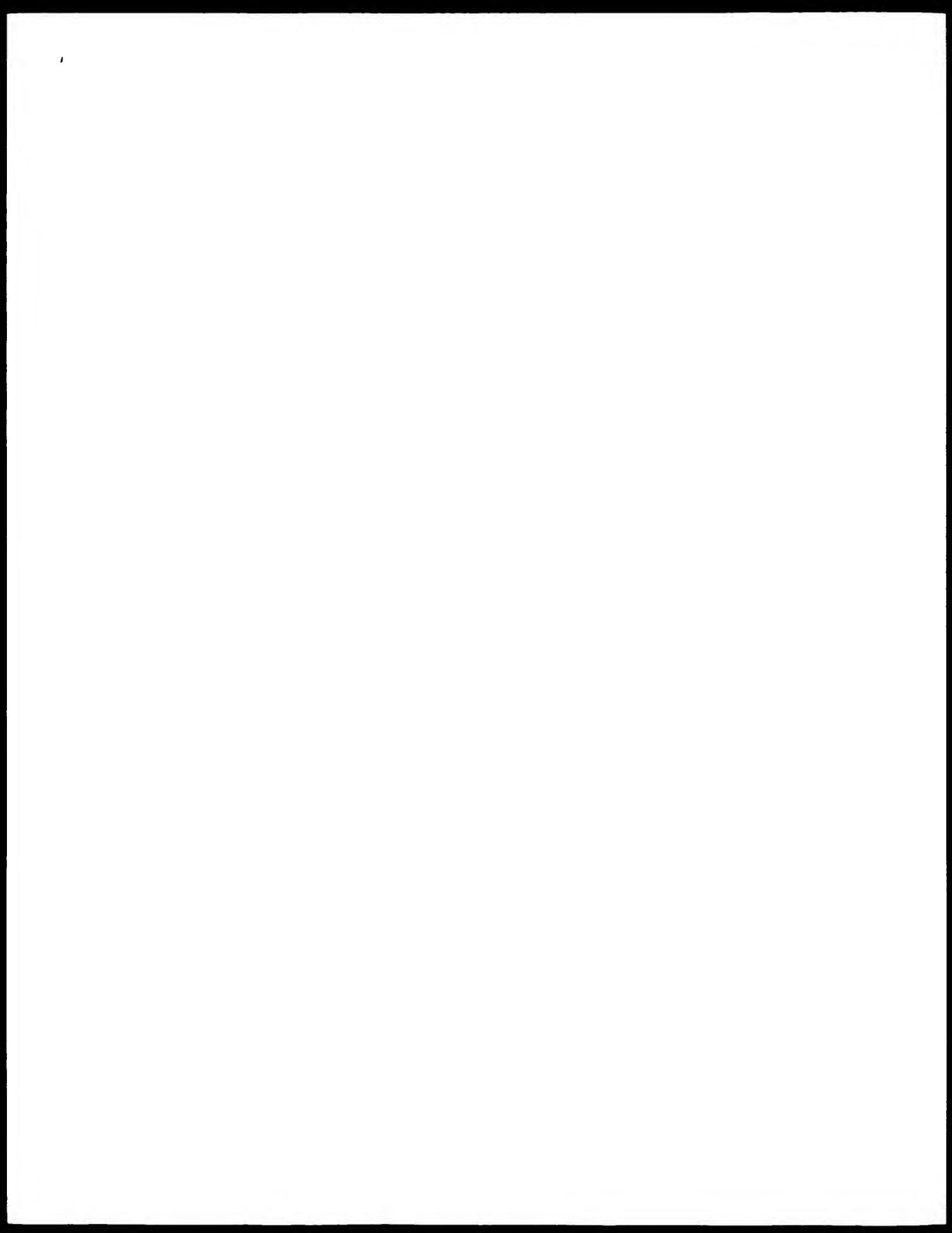
TYPE: PRT

TYPE: PRT
Sequence 11626; Application US/09978825; GENERAL INFORMATION:
APPLICANT: Mitcham, Tennifer
APPLICANT: Skeiky, Yasir
APPLICANT: Wang, Siging
APPLICANT: Wang, Siging
APPLICANT: Can, Syjan
APPLICANT: Carter, String
APPLICANT: Carter, Darin
APPLICANT: Carter, Darick
APPLICANT: Carter, Darick
APPLICANT: Carter, Darick
APPLICANT: Carter, Darick
APPLICANT: Barth, Brenda
APPLICANT: Bouglass, John
TITLE OF INVENTION CONT. 1100 and M:1
FILD REFERENCE: 210121.51461
CURRENT APPLICATION NUMBER: US/09/9/8,825
CUPRENT FILING DATE: 2003-01-29
NUMBER OF FTO IT NOT 70905
SEQ ID NO 11606
LENGTH: 58
TYPE: PRT
ORSANISM: Propioni acnes
US 09-978-825-11626
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Best Local &
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Conservative 0
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0; Mismatches
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LEMBRAL THFORMATION:

APPLICANT: Mitcham, Jennifer
APPLICANT: Skeiky, Yasir
APPLICANT: Maisonneuve, Jean Francois
APPLICANT: Mang, Siqing
APPLICANT: Jen, Siqing
APPLICANT: Lodes, Michael
APPLICANT: Lodes, Michael
APPLICANT: Jones, Pobert
APPLICANT: Jones, Pobert
APPLICANT: Douglass, John
TITLE OF INVENTION: Compositions and Methods
FILE EEFEEENCE, 210121.51401
CURRENT MILLIANTEN NUMBER OF SEQ ID NOS: 30992
SEQ ID NO 24772
LENGTH: 64
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Mitcham, Jennifer
APPLICANT: Mitcham, Jennifer
APPLICANT: Cheiky, Yasir
APPLICANT: Persing, David
TITLE OF INTENTION: Ciposition and Methole
FILE REFERENCE: 210121.514
CURRENT FILING DATE: 2001-04-20
NUMBER OF SEQ ID NOS: 29212
SEQ ID NO 11626
TYPE: PRT
CEGANISM: Fireficht aches
US: 10-057-498-11626
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US-10-057-498-11626
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                                           Conservative
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Concorvative 0, Mismatches
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fred. No. 1.2e+02;
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RESULT 15
US-09-978-R35-24772
Sequence 24772, Application US/09978925
Sequence 24772, Application US/09978925
GENERAL IMPORMATION:
APPLICANT: Mitcham, Jennifer
APPLICANT: Mitcham, Jennifer
APPLICANT: Maisonneuve, Jean Francois
APPLICANT: Maisonneuve, Jean Francois
APPLICANT: Maisonneuve, Jean Francois
APPLICANT: Lodes, Michael
APPLICANT: Jen, Shyian
APPLICANT: Jen, Shyian
APPLICANT: Jens, Shyian
APPLICANT: Jens, Shyian
APPLICANT: Carter, Darrick
APPLICANT: Carter, Darrick
APPLICANT: Dougliss, John
TITLE OF INVENTION Compositions and Mathods for the Therry and Diagnosis of Acnes V
FILE REPERENCE: 210121514C1
CURENT FILMS DATE: 2001-01-29
UNMBER OF SEQ ID NOS: 30992
IENGTH: 64
TYPE: PRT
ORGANISM: Propioni acnes
US-09-978-825-24772
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Search completed: February 20, 2003, 11:42:48 Job time : 17.6667 secs
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Sequence
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enome sequence of Escudomonas actualinosa FAG1, an opportunistic pathor A82950; MUID-20437337; PMID:10984043

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R.Zhong, W., Wang, H., Herndier, B., Ganem, D.
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C;Foywords: Capcid protein
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A;Molecule type: DWA 
A;Pesidues: 1-52 /KUP> 
A;Cross-references: GB
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D.J., Lee, L.N., Lefkowitz, B.J., Lu, J., Matsushima,
; Winkler, M.E.
3, 5709-5717, 2001
T., Toung Bullidu, M., Cha., J., Curt, J., Palty, F.1
of the Bacterium Streptododus phedmoniae Strain R6.
et: A97872, MUID.21429245, FMID:11544234
        DNA
                                                                                                                                 191, 337 346, 1990
and sequence analysis of the genes encoding the
st: $10796; MCID:90345939; PMID:2200674
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191, 337 346, 1990
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R:Hayashi, T. Makino, K., Chrishi, M.; Kurukawa, K.; Ishii
gasawara, N.; Yasunaga, T.; Kuhara, S.; Shiba, T.; Hattori,
DNA Res. 8, 11-22, 2001
A;Title: Complete genome sequence of enterchemorrhagic Esch.
A;Reference number: A99620; MUTD:21156231; PMID:11258796
A;Accession: A99800
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-102 <HAY>
A;Cross-references: GB:BA000007; PIDN-BAB34792 1; PID:g13360
A;Experimental source: strain 0157:H7, substrain RIMD 050990
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A99800
hypothetical protein ECs1369 (imported) - Escherionia ...
C;Species: Escherichia coli
C;Species: Escherichia coli
C;Species: Escherichia coli
C;Sare: 10 Jul.2001 #sequence_revision 19.7ul.2001 #rext_
C;Pare: 10 Jul.2001 #sequence_revision 19.7ul.2001 #rext_
C;Accession: A99800
R:Hayashi, T., Makino, F., Chrishi, M.; Furokawa, F.; Isl
R:Hayashi, T., Makino, F., Chrishi, S.; Shiba, T.; Hatto:
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A;Gene: Atu
A;Map posit
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A;Accession: AG3064
A;Status: ~--1
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A; Residues: 1-98 < KUR>
A; Cross-references: GP
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Eur. J. Biochem 194, 95-102, 1990
A;Title: Cloning and sequence analysis of the genes encoding the Bacillus stearothermophilus.
A;Reference number: S13838; MHID:91071217; PMID:2252629
A;Accession: T46887
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A;Title: The Genome of
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A; Residues: 1-95 < BOR >
A; Cross references EM
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Shiba, T.; Hattori, M.; Shinagawa, H.
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A, Reference number: 2
A; Accession: T44499
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-106 < II
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A; Gene: CESP: Y9C2UA.2
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C;Accession: T27486
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C; Superfamily:
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A; Residues: 1-10
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De EMBL Data Library, April 1999
Characterication of a Thermomonospora forca family 48 exhcellulase B6.
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larity 100.0%; Pred. No. 1.3e+02;
Conservative 0, Mismatches 0, Indels
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protein - reovirus type 1 (st - names nonstructural protein

(strain Lang)

reovirus

type 1

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C;Date: 35-Jun 1988 #sequence_tevision 35-Jun-1988 #text_charge [C;Accession: B26436]

R;Munemitsu, S.M.; Atwater, J.A.; Samuel, C.E.

Biochem. Biophys. Res. Commun. 140, 509 514, 1986

A;Title: Biophys. Res. Commun. 140, 509 514, 1986

A;Perference number: A90129; MUID:87048799; PMID:2420568

A;Residues: 1-119 <MUN>

A;Cross-references: GB:M14//0; NID:g333/44, FIDN.AAA1/2//.1, Fid:A;Note: the authors translated the codon CAA for residue 5 as Glu
                                                                                                                                                                                                                                                                                                                                                         probable peroxidase (EC 1 11 1 7), cationic - rice (f) C;Species: Oryza sativa (rice) C;Accession: TC4366 R;Kim, C:Y.; Jeong, S:Y.; Choe, M.S.; Cheong, Y.H.; He submitted to the EMBL Data Library, March 1997 A;Decoription Ifolytion and characteristics of earl; A;Reference number: Z15314 A;Accession: TC4366 A;Status: proliminary; translated from GB/FMPI/DDBU A;Molecule type: mRNA A;Residues: 1-122 <KIM>
A;Cross-references: EMBL:U95217; NID:g2443458; PIDN:AJC;Genetics:
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A., Liu, F., Wilkie, G., Sattung, E., Miller, M., Blanchard, M., Qurollo, B., Soluman, A., Liu, F., Wollam, C., Allinger, M., Doughty, D., Scott, C., Lappas, C., Markelz, B., Science 204, 2323 2329, 2001 |

A,Title Genome Sequence of the Flunt Futhogen and Bloboolhology Agent Agrobacterium tume A,Reference number: A97359, PMID:11743194 |

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#### SUMMARIES

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Rawasawa Y., Kume K., Nakade S., Haga H., Izumi T., Shimizu T., "Brain-specific emplession of novel G-protein-oopled receptors, whomologies to Kunipus FOFC4 and human GFR4C.",

Biochem. Biophyo. Rep. 1-rmin. 2 'c.bi. beile...

-!- FUNCTION: Orphan receptor. May play a role in brain function
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PS4741; Q9L002; Q9F365;

T 01-OCT-1996 (Rel. 34, Created)

T 16-OCT-2001 (Rel. 40, Last sequence update)

JT 15-JUN-2002 (Rel. 41, Last sequence update)

E Geille/threunine protein kinase afsK (EC 2.7.1..).

ARSK OR SC04423 OF SC6F11 21 OP SCD6 01.

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Articly whiles, Ctreptomyces.

NCBI TaxID=1902;

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SEQUENCE FROM N.A.

STRAIN A3(2);

MEDLINE:94241158, FubMed 8063104,

MEDLINE:94241158, FubMed 8063104,
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Heda K., Homeyama T., Beppu T., Horinouchi S.;
"The unital myselfum defective planetype of Otroptomyces griseus
texulting from A.fortor deficiency to suppressed by a Cor/Thr Air
of S. corlicator A3(2).";
Gene 169:91-95(1996).
                                                                                          "Implete Jenené Lequénio if the model actinomycobe Strepting your coelicolor A3(2).";
Macare 417.141 147(2002).
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MEDITIE-94241:08, PubMed 8003104,
Matsumoto A., Hong S.K., Ishizuka H., Horinouchi S., Beppu T.,
"Phosphorylation of the AfoR protein involved in recondary metabolism
in Otroptomyces species by a sukarystic type protein kinase.";
Gene 146:47 56(1994).
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K., Junes K.D., Harris T.E., Quail M.A., Kleder H.,

R., Junes K.D., Harris T.E., Quail M.A., Kleder H.,

Rateman A., Brown S., Chandra G., Chen C.W., Collins M.,

Fracer A., Jille A., Hidald. J., Hurneby T., Howarth S.,

Kieser T., Larke L., Murphy L., Oliver K., O'Neil S.,

Sch E., Rajandream M.A., Rutherford K., Rutter S.,

Saunders D., Sharp S., Squares E., Squares S., Taylor K.

Wietzuriek A., Woodward J., Barrell B.G., Parkhill J.,
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MEDLINE OF 18(000), Fulked-8635757.

Weda K., Umeyama T., Beppu T., Horinouchi S.,

"The Berial mycelium defectionery is suppress
resulting from A-factor deficiency is suppress
of S. coelicolor A3(2).";

Gene 169:91-95(1996).

-!- FUNCTION: INVOLVED IN THE REGULATION OF SECONDA
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                                                   This SWISS-PROT entry is copyright It is produced through between the Swiss Institute of Bioinformatics and the the European Bioinformatics Institute. There are no resuse by non-profit institutions as long as its content modified and this statement is not removed. Usage by a entities requires a license agreement (See http://www.isborsend an email to license@isb-sib.ch).
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RA Hawkins C.F., Borges A., Perham R.N.;
RA Hawkins C.F., Perham R.N.;
Ra Hawkins C
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Hawkins C.F., Borg
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16-OCT-2001 (Rel. 40, Last annotation update)
Hypothetical protein in pdhA 5'region (ORF1) (
Bacillus stearothermophilus.
Bacteria; Firmicutes; Bacillales; Geobacillus.
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Natl. Acad. Sci. U.S.A. 82:24-28(1985).
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RY MEDLINE 91248417, PubMcdi2039605;

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RY Medline 91248417, Prodewald R., Braunitzer G., Ncuzil E.,

RY Medline 91248417, PubMcdi2039608;

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-!- MISCELLAMENUS. HELD IS NOTHE GLOBIN FAMILY.

LAMPREY.
-!- SIMILARITY: BELONGS TO THE GLOBIN FAMILY.

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Modela, Thirthia, Thatlita, Thirthia, Typercartia,
Tiformes, Petromyzoulidae, Petromyzon.
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I., Rudewald M., Allaid M., Medmil E., Braunitzer G.;
Lidetare of the minor haemoglobins from the sea lamprey
marinar, Cyclolomata).";
I Hoppe-Seyler 368:145-154(1987).
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Globin II.
Mordacia mordax
Eukaryota; Metaz
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MEDLINE-20250908; PubMed=10788466;
MEDLINE-20250908; PubMed=10788466;
Qiu Y., Maillett D.H., Knapp J., Olson J.S.,
"Lamprey hemoglobin Structural basis of the
"Lamprey hemoglobin Structural basis of the
J. Biol. Chem. 275:13517-13528(2000).
-!- SIMILARITY: BELONGS TO THE GLOBIN FAMILY
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16-OCT-2001 (Rel. 40, Created)
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16-OCT-2001 (Rel. 40, Last sequence
Globin II (Hemoglobin PMII').
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HSSP: P02209; 21HP

InterPro: IPP000971; Globin

Pfam; PF00042; globin; 1.

PROSITE; PS01033; GLOBIN; 1.

Heme; Oxygen transport; Transport.

TEQUENTE 149 AA, 16476 MW, 16476-1960B84ESAA
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Hombrados I, Vidal Y, Bodowald Y, Braun
"The primary structure of the hemoglobins damprey (Mordacia mordax, Cyclostomata) ";
Biol. Chem. Hoppe-Seyler 372:49-56(1991).
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InterPro; IPR002335; Myuqlubin
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PRINTS; PR00613; MYCGLOBIN.
PROSITE; PS01033; GLOBIN; 1.
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                                             Heme: Oxygen transport; INIT MET 0 0 0 0 SEQUENCE 144 AA: 163;
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Eukaryota; Motazoa; Chordata; Craniat
Petromyzontiformes; Petromyzontidae;
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SIMILARITY: BELONGS TO THE
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P02208; 2LHP
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southern hemisphere
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PIR; S.

HSSP; P02200,

InterPro; IPRO

Pfam; PF00042;

PFC, PSC1/
HESP; PS01033; GLOBIN; 1.

PROSTITE; PS01033; GLOBIN; 1.
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Globin III.
Mordacia mord
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P09968;

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Globin III.
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MEFLIME=91248
Hombrados I.,
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Eukarysta, Me
Petromyzontif
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PROSITE, PS01
Heme; Oxygen
SEQUENCE 14
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SEQUENCE
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Hombrados I , Podewald K., Allard M , Neuril
"Primary structure of the minor haemoglobins
(Petromyzon marinus, Cyclostomata).";
Biol Chem. Hoppe-Seyler 358-145-154(1987)
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- SIMILARITY: BELONGS TO THE
R; S13460; S13460.
SP; P02208; 2LHB.
terPro; IPR000971; Globin.
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174nsport; Transport.
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, Vidal Y., Podewald K., Braunitzer G., Neuzil E.;
structure of the hemoglobins of a southern hemisphere
dacia mordax, Cyclostomata).";
Hoppe-Seyler 377.49-56(1991).
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Hetarca, Chordata, Craniata, Vertebro
formes; Petromyzontidae; Petromyzon
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Honzathe R.E., Hendrickens W.A., Toke W

"Refinement of a Molecular model for lar

Petromyzon marinae.",
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V. Mol. Riol. 184.147-164(1985).
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J. Picl. Chem. 245:6140 6160(1970).

X.RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).

MEDLINE-73143800; DubMod-4692855;

Hendrickson W.A., Love W.E., Kaile J.,
"Crystal objusture analysis of sea lamprey hemoglobin resolution.";

J. Mol. Biol. 74:331-361(1973).
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MEDLINE-8325/424; PubMed-6409159;

Hombridon I, Podewild F., Neugil F., Prounither G.,

"Haemoglobino, IM. Primar, ciruoture of the major baeno
sea lamprey Petromyzon Harinus (war. Garonne, Loire).";

Biochimie 65:247-257(1983).

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01-OCT-1996 (Rel. 34, Last sequence update)

16-OCT-2001 (Rel. 40, Last annotation update)

CBP4 protein, mitochondrial precursor.

CBP4 OR YGR174C.

Saccharomyces cerevisiae (Baker's yeast).

Eukaryota, Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution

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Bentley S.D., Chater K.F., Cordono-Tarraga A.-M., Challis G.L.,

KA Thomson N.E., James K.D., Harris D.E., Quail M.A., Kieser H.,

FA Harper D., Hateman A., Brown S., Chandra G., Chen C.W., Collins M.,

EA Cronin A., Fraser A., Goble A., Hidalyo J., Horneby T., Howarth S.,

EA Huang C. H., Elecer T., Larke L., Murphy L., Cliver F., C'Neil S.,

EA Seeger K., Sainders D., Sakry S., Squares E., Squares S., Toylor K.,

Wirtel T., Wicticrick A., Woodward J., Barroll D.G., Farkhill J.,

RA Hopwood D.A.,

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EMBL; AB064662; BAB93523.1; -.

Interpre; iPk000276; GPCR_EHodpsn.

Interpre; iPk0005136; VlR.

Pfam; PF03402; VlR; 1.

PROSITE; PS50262; S_PROTEIN_RECEP_F1_2; 1.

Receptor.

ShqHBNCH 308 AA; 353/0 MW; CB6Abb3841420192 CRC64;
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Medline 37000301, SubMed 5843436;

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Medline 37000301, SubMed 5843436;

Minashi H., Mipwood D.A.;

"A set of ordered cosmids and a detailed genetic and physical map for the 8 Mb Streptomyces coelicator A3(2) obromosome.";

Mol. Microbiol. 21:77 96(1996).
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Submitted (MAR 2656) to the EMBL/GemFam

-1- SIMILAPITY CONTAINS 7 WD FEFFATS (
EMBL; AC012654; AAF43237.1; -.

InterPro; IPPO01680; WD40

Pfam; PF00400; WD40; 7

R PRINTS; PR00320; WD40; 7

R PROSITE; PS00678; WD_REPEATS_1; UNENOWN

PROSITE; PS50082; WD_REPEATS_2; 7.

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01-JUN-1998 (TrEMBLE 1.06, Last sequence update)
01-JUN-1998 (TrEMBLE 1.21, Last annotation update)
High-affinity lysophosphatidic acid receptor homolog Homo sapiens (Human).
Eukaryota: Motazca; Chordara; Craniata, Vertebrata; Mammalia: Eutheria, Primates; Catarrhini, Hominidae, NCBI_TaxID-9606;
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Arabidopsis thaliana (Mouse-ear cress).
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Spermatophyta, Magnoliophyta, Andridopsis
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E., Chao Q., Conn I
R., Kim C., Lam P.,
P., Ecker J.,
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Q1-OCT-2001 (TrEMBLrel 18, Created)
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Q1-DEC-2001 (TrEMBLrel 19, Last segmence upd
Q1-DEC-2001 (TrEMBLrel 19, Last annotation upd
Q1-DEC-2001 (Tremble)
Hypothetical protein SP0077.
SP0077.
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Streptococcus pneumoniae.
Bacteria; Firmicutes; Bacillus/Clostridium gr
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MCBI_TaxID-1313;
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Yamada K, Iiu S X, Sakano H, Pham P K, Banh J, Chung M K.,

Goldsmith A D., Lee J M, Quach H L, Toriumi M, Yu G., Bowser L.,

Carninci F., Chen H., Cheuk F., Hayashinaki Y, Ishida J, Jones T.,

Kamiya A., Karlin-Neumann G, Kawai J, Kim C, Lam R, Lin J.,

Kimranda M., Narusaka M., Nguyen M., Palm C.J., Sakurai T., Satou M.,

Seki M, Shinn P, Southwick A, Shinozaki K, Davis P W, Foker J.R.,

Theologis A.;

"Arabidopsis Full Length CDNA Clones.";

Submitted (FEB-2002) to the EMPL/GenPank/DDDJ databases.

EMPL, AY080732; AAL86002.1; -.

Hypothetical protein.

SEQUENCE 407 AA; 43791 MW; 712D7CADDJ790833 CRC64;
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K MELLINE LILL'E., Fulled 11403910,

A Petreson S. Heddelkerg 1. Nebry R 1. Haft N. H., Read T.D.,

A Durkin H., Welson K.E., Paulsen I.T., Elsen J.R., Read T.D.,

A Durkin H., White O., Salzberg S.E., Nebst M.J., Februard T.D.,

A Complete D., Klouri H., Wolf A.M., Strekack T.E., Handen E. C.

A Holt T.E., Loftus B.J., Yang F., Smith H.O., Venter J.C.,

A Dougherty B.A., Morrison D.A., Bollingehead S.E., France C.M.,

T "Complete genome sequence of a virolest isolate of Streptococcus pneumoniae.",

S Closed 294.444 North C.C.)

ENSEL, ALGORD, Complete proteome.

GW Hypothetical protein, Complete proteome.

GW SECONS SECOND, Complete proteome.
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01-FEB-1997 (TIEMETICL CC, Last brighter if late)

1 01-NOV 1998 (TYEMETICL CC, Last brighter if late)

1 01-NOV 1998 (TYEMETICL CC, Last brighter if late)

2 Unidentified orf.

8 Kapcsi's sarcoma-associated herpesvirus (KSHV) (Human horitates; deema viruses), incomm. SNA stage, Herpesviridae,

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O1-JUN-2002 (TIEMBLiel 01, Last sequent)

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Hypothetical protein TTE2763.

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Q1-JUN-2001 (TrEMBLrel. 17, Created)
Q1-JUN-2001 (TrEMBLrel. 17, Last sequence update)
Q1-JUN-2001 (TrEMBLrel. 19, Last sequence update)
Q1-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Q1-DEC-2001 (TrEMBLrel. 19, Last sequence update)
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MEDITE 11591816, FubMed 11997336;

FAR Q., Tian Y., Di W., Xu Z., Xuan Z., Hu S., Dong W., Yang J.,
Chen Y., Yang J., Xu X., Xu X., Suan Z., Hu S., Dong W., Yang J.,
Then Y., Yang J., Yang J., Yang H.;
"A complete sequence of T. trigoonjuncts genome.";

Sequence FAR 17 FAR TON(2002).

EMBL; AE013214; AAM25868.1; -.

EMBL; AE013214; AAM25868.1; -.

ENBL; AE013214; TAM25868.1; -.

ENBL; AE013214; TAM25868.1; -.

ENBL; AE013214; TAM25868.1; -.
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76 NA; 8274 MW; 155AF50630D38BDA CRC64;

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DT 01-DEC-2001 (TrEMBL.
DE RNA binding protein.
OS Grapevine virus D.
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Abou Ghanem N., Surre
Abou Ghanem N., Surre
Martelli G.P.;
"Properties of grapevino virus D. a
"Properties of grapevino virus D. a
"Properties of grapevino virus D. a
Table Parhol 78.15.25 (1997)
FMRL; Y07754; CAA69071.1; -.
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Thousands of AA; 10459 MW; 7576;
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Q8U0Y1;
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SEQUENCE FROM N.A.
STRAIN=VC1 / DSM 3638 / ATCC 43587 / JCM 8422;
Weiss R.B., Dunn D M , Robb F T , Brown T P ;
"The complete sequence of the Pyrococcus furiosus Submitted (FEB-2002) to the EMBL/GenBank/DDBJ data EMBL; AE010247; AAL81574.1; ".
Hyporhetical protein; Complete proteome.
SEQUENCE 94 AA; lu554 MW; CEBAD48A76AF7CE8 CRO
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Abou Ghanem N., Saldarelli
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NCBI_TaxID=2261
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RX MEDLINE_21608550, FubMed_11743193,

RX MEDLINE_21608550, FubMed_11743193,

RX MEDLINE_21608550, FubMed_11743193,

RX MCOd D W , Setubal J C., Kaul P , Monks D E , Kitajima J.P.,

RA Chura V.K , Zhou Y , Chen L., Wood G E , Almeida N F Jt , Woo L.,

RA Chen Y., Faulsen I.T , Eisen J A , Kaip F E , Formula D.,

RA Chapman P., Clendenning J., Deatherage G., Gillet W., Grant C.,

RA Chapman P., Clendenning J., Deatherage G., Gillet W., Grant C.,

RA Kutyavin T., Levy R., Li M JT , McClelland E , Falmiori A ,

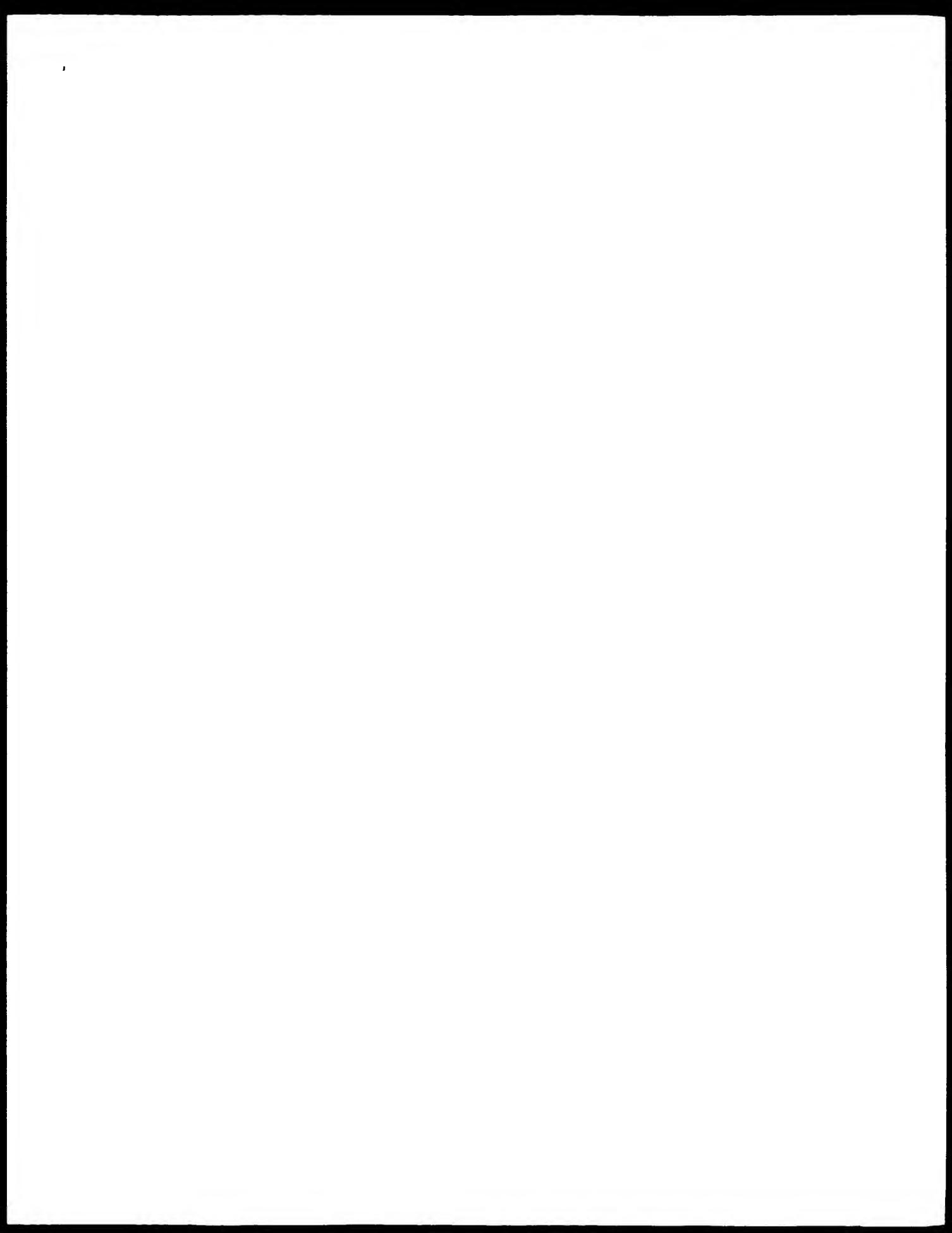
RA Kutyavin T., Levy R., Li M JT , McClelland E , Falmiori A ,

RA Raymond T , Fouse G , Saenghismanthis T , W., Z , Fomer of A ,

RA Chumley F , Tingey G V , Tomb J -F , Gordon M P , Olson M.V.,

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ATU4133.
Agrobacterium
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EMBL; AE009344; AAL44933.1; -.
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Result No.	Score	Query Match	Length	DB	ID	Description
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w	41	91.1	256	21	AAG09463	psis t
4.	41	91.1	256	21	AAG44075	
5	41	91.1	255		AAG48293	
9	41	91.1		21	AAG09462	
7	41	91.1	325	21	AAG44074	
8	41	91.1		ر. 1	AAG48292	
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Nature 408, 816 820, 2000

A;Anthors: Hutter, J. J., Tenkins, T., Johnson-Hermen, J., Khan, E., Khan, C.A., Li, J.H., Li, Y., Lin, X., Liu, G.X., Liu, C.A., Chung, M., Khan, E., Khan, E., Khan, E., Khan, E., Khan, E., Khan, E., Khan, K., Wall Rizzo, M., Rochey, T., Bowley, D., Sakano, H.

A;Author: Callbrig, F.L., Chwitt, J.F., Skinn, F., Senthwirk, A.M., Ker, M., Wu, D., Yu, G., Fraser, C.M., Venter, J.C., Bavis, F.W., A.M., Linder, Applied And Johnson, Applied And Applied Applied And Applied And Applied And Applied And Applied And Applied Appli
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RESULT 6
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C,Species. Homo sapiens (man)
C;Date: 02-Aug-1996 #sequence\_revision 02-Aug-1996 #text\_change 11-Jun 1999
C;Accession: 173631; 138357; 866384; 844129
R;Shelton, D.L.; Sutherland, J.; Gripp, J.; Camerato, T.; Armanini, M.P.; Phillips, J. Neurosci. 15, 477 491, 1995
A;Title: Human trks: molecular cloning, tissue distribution, and expression of extra A;Reference number: 156557; MUID:95123473; PMID:7823156

A; Recession: 197647 | Telepholic Follows | Follows | Follows | A; Accession: 173631 | A; Status: preliminary; translated from GB/EMBL/DDBJ | A; Status: preliminary; SBE\_276474, NID\_3713710, FIDW:AAB33110.1; FID:393720 | A; Status: preliminary; SBE\_276474, NID\_3713710, FIDW:AAB33110.1; FID:393720 | A; Status: preliminary; SBE\_276474, SEE; WID:27936202 | A; Status: preliminary; SBE\_276474, SEE; WID:7936202 | A; Status: preliminary; SBE\_276474, SEE; WID:7936202 | A; Status: preliminary; SBE\_276474, SEE; WID:7936202 | A; Status: preliminary; SBE\_276474, SEE; SBE\_2764744, SEE; SBE\_2764744, SEE; SBE\_2764744, SEE; SBE\_2764744, SEE; SBE\_276474, SEE; SBE\_27 1

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A;Description: regulation of normous system doveltprest, receptor for train derived now; C;Superfamily: nervo growth factor receptor, high affinity, leuning-rich alpha 2-glycopt C;Superfamily: nervo growth factor receptor, high affinity, leuning-rich alpha 2-glycopt C;Superfamily: nervo growth factor receptor factor systemin, growth factor inase

E;11.31/Demain: signal sequence #status predicted <SIGs

E;22.Product: brain-derived neurotrophic factor receptor #status predicted <MATs

E;32.41c/Demain: leucing-rich alpha 2-glycoptorein repeat hemology *IEP1s

E;34.15/Demain: leucing-rich alpha 2-glycoptorein repeat hemology *IEP1s

E;116-138/Demain: leucing-rich alpha 2-glycoptorein repeat hemology *IEP2s

E;116-138/Demain: leucing-rich alpha 2-glycoptorein repeat hemology *IEP2s

E;453-452/Demain: transmembrane #status predicted <TMNs

E;453-822/Demain: transmembrane #status predicted <TMNs

E;453-822/Demain: protein kinase hemology *YINs

E;564-552/Demain: protein kinase ATP binding motif

E;672/Active site: Lys #status predicted

E;706/Binding site: phosphate (Tyr) (covalent) (by autophosphorylation) #status predicted

E;706/Binding site: phosphate (Tyr) (covalent) #status predicted
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R;Shelton, D L : Sutherland, J : Gripp, J
J. Neurosci, 15, 477-491, 1995
A;Title: Human trks molecular cloning, tic
A;Peference number: Icccc, MHTD,05123473;
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R;Nakagawara, A; Liu, X G; Ikegaki, M; White, P S; a Genomics 25, 538-546, 1995

A;Title: Cloning and chromosomal localization of the huma; Reference number: A56853; MUID:95309922; PMID:7789988

A;Accession A56853

A;Residues: 1-822 -NAF-

A;Residues: 1-822 -NAF-
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N;Alternate names: receptor tyrosine kinase trkB
N;Contains: protein-tyrosine kinase (EC 2.7.1.112)
C;Species: Homo sapiens (man)
C;Date: 11-Aug-1995 #sequence_revision 11-Aug-1995
C;Accession: A56853; I56557
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E;67,95,101,179,205,041,054,090,325,339,359,412/Binding site: carbohydrate (Asm)
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A;Residues: 1-822 <5HE>
A;Cross references: GP (
C;Genetics:
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D70847
hypothetical protein Rv0059 - Mycobacterium tuberculosis (strain H37RV)

C; Species: Mycobacterium tuberculosis

C; Date: 17-Jul-1998 #sequence_revision 17-Jul-1998 #text_change 20-Jun-2000

C; Accession: D70847

R; Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, R; Connor, R., Davies, R., Devlin, K., Feltwell, T., Gentles, S., Hamlin, N., Pajandream, M.A.; Royers, J.; Rutter, S.; Seeger, K.; Skelton, S.; Squares,
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RESULT

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\_revision 17-Jul-1998 #text\_change 20-Jun-2000

Harris, D.; Gordon, amlin, M., Holtoyd, Squares, S.

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A,Reference number: 222790

A,Recession: T44538

A;Status: preliminary, translated from GB/EMBI/CDBJ

A;Molecule type: DNA

A,Molecule type: DNA

A,Residues: 1-185 <NAK>
A,Residues: 1-185 <NAK>
A,Cross-references: EMPI.AB020805, FIDM BAA83153.1

A;Experimental source: strain PAO1

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probable protein fo li homolog pfo [similarity]

C,Species. Homo sapiens (man)

C;Date: 21-Dec-1996 #sequence_revision 06-Jun-10

C;Accession: G01586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 P,Makayama, K., Takashima, K., Ishibara, H., Shimomiya, T., Kagoyama, M., K.
submitted to the EMBL Data Library, August 1999
A,Description: Genetic relationship between bacteriorins and bacteriophagos
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Residues: 1-591 <YEW>
A;Cross-references: EMBL:U18247; NID:g603224; PIDN:AAA57339.1; PID:g603225
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A; Residues: 1-591
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A, Experimental source: strain PAO1
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A; Pesidues: 1-185 <
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C,Mate: 31-Jan 23
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C. AR2950, MMTD 104377377, PMTD 10984043
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K.P.; Kas,
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A., Larbig, K., Lim,
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pribable alighably culfinates transport primerae pribable and (imputed) - Per CySpecies: Yersinia pestis
CySpecies: Yersinia pestis
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CyDate: 02:McY:211 #: Tarace_revisits of McY:211, F.W., Wilder, McT.G., Prest
CyDate: 02:McY:211 #: Tarace_revisits, McG441
RyDathill, J., Wren, B.W., Thrown, M.F., Tithall, F.W., Wilder, McT.G., Prest
dear Tarace, A.M., Thrown, McC441
RyDathill, J., Wren, B.W., Thrownde, M., Skelton, J., Stevens, K., Whitehead, S.,
Ill, M., Rutherford, K., Simmonde, M., Skelton, J., Stevens, K., Whitehead, S.,
AyAccession: ACC441
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AyAccession: ACC441
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AyCross-reference- TP AllTarace, first Advanced.
AyCross-reference- TP AllTarace, first Advanced.
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A;Authors: Sqares, R.; Sulcton, T.F.; Taylor, F.; Whitchoad, S.; Barr A;Authors: Sqares, R.; Sulcton, T.F.; Taylor, F.; Whitchoad, S.; Barr A;Title: Deciphering the kinner to be realized to the constant of the c
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addman, S., Yuan, Y., Erody, L.L., C.

Nature 406, 959-964, 2000

A; Title: Complete genome sequence of A; Accession: H83214

A; Accession: H83214

A; Accession: H83214

A; Molecule type: DNA

A; Residues: 1-262 CTO

A; Cross-references: GB: AE004765; GB

A; Experimental source: struin FA01

C; Genetics:
A; Gene: PA3443

C; Superfamily: Synechooccous nitrate
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Tavis, T., T., jat, J.,
hitchcad, S., Barroll,
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A; Reference number: ABD A; Reference number: ABD A; Status: proliminary A; Status: 1 266 - 5UK A; Status: 1 266 - 5UK A; Status: 1 266 - 5UK A; C; Genetics: A; Frg.-1; Sential 2013 - 6.

C; Genetics: A; Genetics: plasmid A; Genome: plasmid A; Genome: plasmid
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E75295

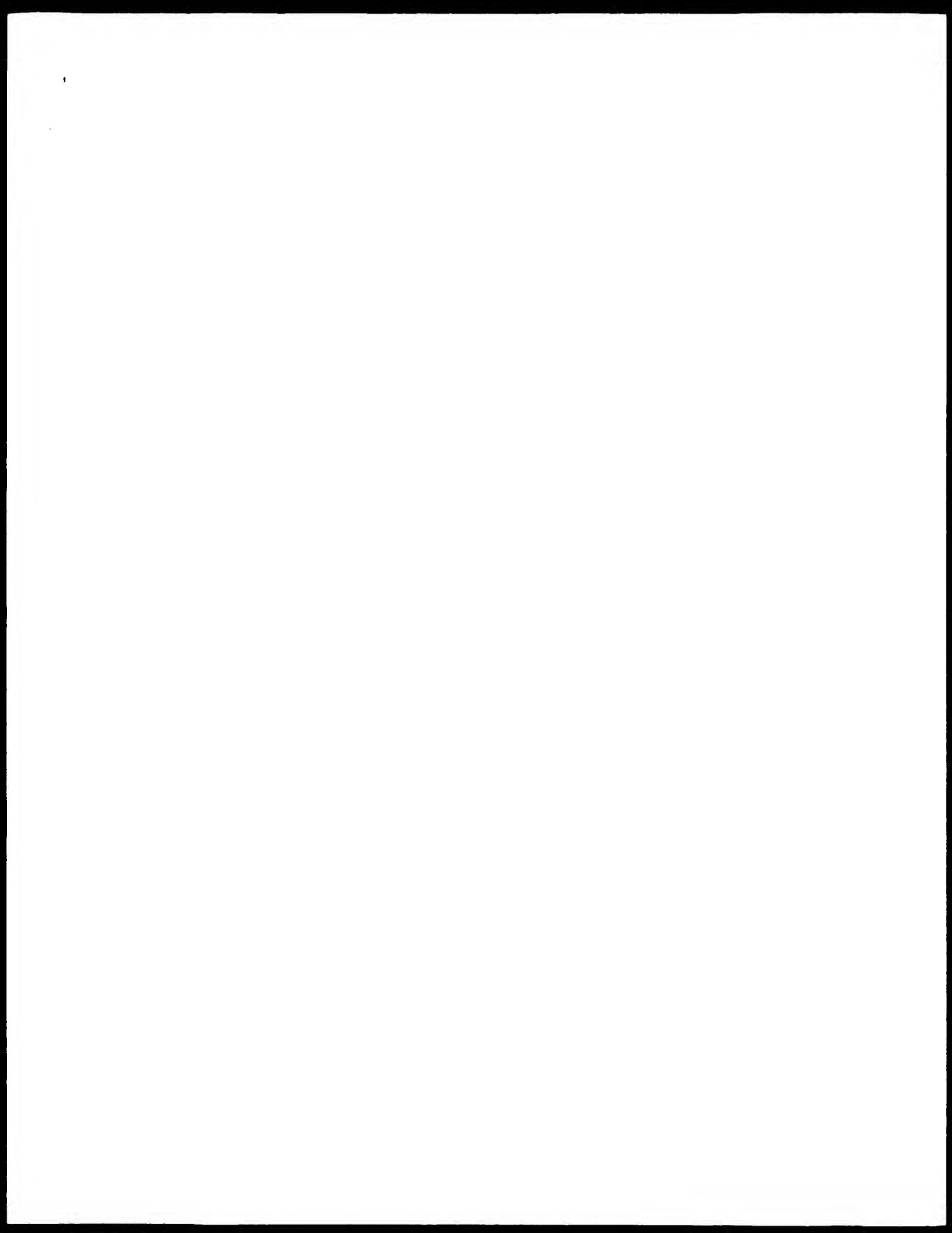
C;Species: Deingegrenge_revision of hem-1444 Brext_change 17-Mar-2000
C;Date: Us-Leg-lyye #segmenge_revision of hem-1444 Brext_change 17-Mar-2000
C;Accession. E75295
C;White, O.; Eisen, J.A.; Heidelberg, J.F.; Hickey, E.K.; Peterson, J.D.; Dodson, R;White, O.; Eisen, J.A.; Heidelberg, J.F.; McDonald, L.; Utterback, T.; Zalewski, M. Shen, M.; Vamathovan, J.J.; Lam, P.; McDonald, L.; Utterback, T.; Zalewski, F.; Taser, C.M.
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Henkle-Duebrsen K.C., E. ....
Walter R.D.;
Walter R.D.;
"Gene structure, activity and localization of a catalase "Gene structure, activity and localization of a catalase "ser-ellular bacteria in Onchopera volvulus.";
intracellular bacteria in Onchopera volvulus.";
Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases.
The France of Tells as Mitter Textor Effects of Hypergen
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NCBI_TaxID-77551;
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Allen S.J., Dawbain
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                                                                                                                        Shelton D.L., Sutherland J., Gripp J., Camerato T., Armanini M.P., Phillips H.S., Carroll K., Spencer S.D., Levinson A.D.; "Human trks: molecular eloning, tissue distribution, and expression of extracellular domain immunoadhesins."; J. Neurosci 15:477-491(1995)
                                                                                                                                                                                                                      SEQUENCE FROM N.A., AND FARTIAL SEQUENCE (LONG AND TRUNCATED FORMS).
TISSUE=Brain;
MEDLINE:95123473; PubMed=7823156;
Shelton D.L., Sutherland J., Gripp J., Camerato T., Armanini M.P.,
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Genomics 25:538-546(1995).
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I chromosomal localization of the human
otor gene (MTFF2).";
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Equience of position effect variegation in Drosophila on documence of position effect variegation in Drosophila on documence encoding an unusual zinc finger protein.";

Mature 344.219-223(1990).

FINATION THIS PROTEIN IS A POSE-LIMITING FACTOR IN FOULTION-
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15-UL-1999 (Rel. 37, Last annotation update)
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01-00T-1996 (Pel. 34, Created)

15-JUL-1998 (Rel. 36, Last sequence update-
16-00T-2001 (Rel 40, Last annotation update)

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RESCHERICHIA: Protechacteria; gamma subdivision; Enterchacteriaceae;

RESCHERICHIA.

NCBI_TaxID=562;

NI

SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

REDLINE=96105196; Pubmed-8529872;

NI

Iwanicka-Nowicka R., Hryniewicz M.M.;

"A new gene, obl. encoding a momber of the LysR family of transcriptional regulators belongs to Escherichia coli cys regulon.";

Gene 166:11-17(1995).

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SEQUENCE FROM N.A.

STPAIN-K12 / MG1655;

MEDLINE=97426617, Pubmed 9278503;

MEDLINE=97426617, Pubmed 9278503;

MEDLINE=97426617, Pubmed 9278503;

MEDLINE=97426617, Pubmed 9278503;

N. Platthor F P. Plunka++ G. III, Plunka A., Peth N.T., Putland V., Pilatthor F., Pulnka++ G. III, Plunka A., Pode G.F., A., Pilatthor F., Pulnka++ G. III, Plunka A., Fose D.J.,

NA Gregor G., Davis N.W., Kirkpatrick H.A., Gueden M.A., Fose D.J.,

NA Mau B., Shao Y.;

"The complete genome sequence of Escherichia coli Exiz:";

Colience 277:1453-1474(1997).
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EMPL; AECOC290; AAC75049 1; -
EMBL; D90837; BAA15805.1; -.
HSSP; P45600; 1AL3.
EccGene; EG14264; cbl.
InterPrc; IPP00847; HTH_Lysp.
InterPrc; IPP005119; Lysp_subst
Ffam, PFC0126, HTH_1; 1.
Ffam, PFC0126, Lysp_substrate;
PPINTS; PPO0039; HTHLYSp.
PROSITE; PS00044; HTH_LYSp.
PROSITE; PS00044; HTH_LYSp.
DNA_BIND 19 39 H-
CONFLICT 143 143 A
SEQUENCE 316 AA; 35856 MW;
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    163
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4;
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ption regulation; DNA-binding; Complete proteome 19 39 H-T-H MOTIF (POTENTIAL).

143 A > R (IN REF. 1).

316 AA; 35856 MW; 70CB59476501067C CRC64;
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larity 80.0%;
Conservative
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39; HTHLYSR.
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16-CC1-2001 (Rel. 40, Last sequence up
16-CCI 2001 (Re
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EMBL; AE005711; AAX22365.1; -.
HSSP; P11409; 1800.
REBASE; 2539; M.CCIMI.
TIGR; CC0378; -.
INTERPRO; IPRO01091; CN4 Metransf.
INTERPRO; IPRO01091; N6/M4 Metransf.
INTERPRO; IPRO00051; SAM_bind.
Pfam, PP01555, N6 M4 Mtase; 1.
PRINTO; PR005051; SAM_bind.
Pfam, PP01555, N6 M4 Mtase; 1.
PRINTO; PR005062; S21N4MTFRASE.
PRINTO; PR00508, G21N4MTFRASE.
Transferase; Methyltransferase; DNA 1.
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G358 AA, G3665 MW, CF432
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5 protein-coupled receptor GPR45 (FGP24-alpha)
                                                   Motazda, Chordata,
Buthoria, Frimatos,
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C "Discovery of three Grovel S.R., O'Dowd B.F.;
T "Discovery of three Grovel S.R., O'Dowd B.F.;
C -!- SUBCELLULAR LOGATION: Orphan Group Perfection of the basal forebrain, frontal cortex, and caudate, but not in thalamus,
C hippocampus, or putamen.
C -!- SIMILARITY: BELONGS TO FAMILY 1 OF G-PROTEIN COUPLED RECEPTORS.
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Matches
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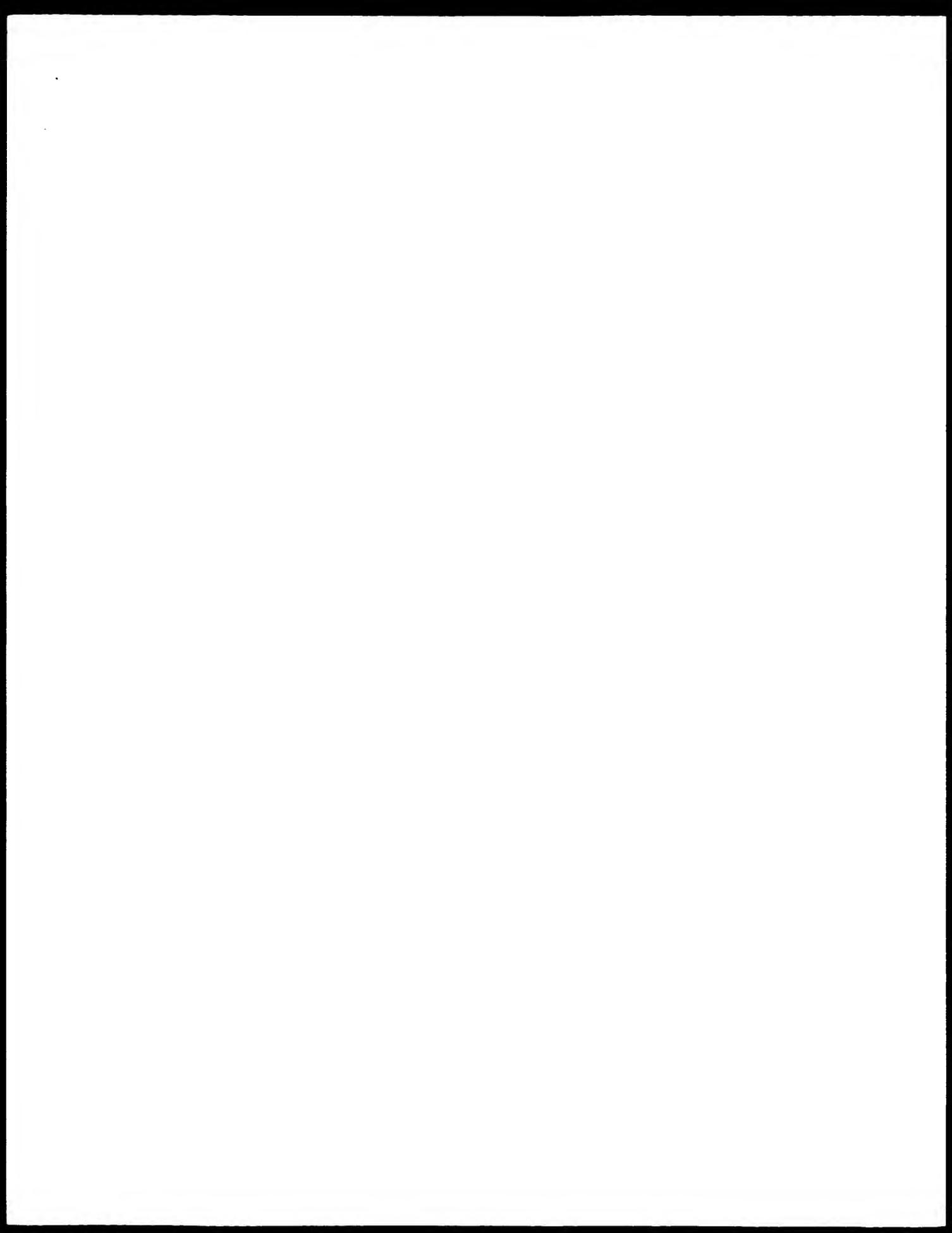
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SPTREMBL 21:*

1: sp_archea:*

2: sp_bacteria:*

4: sp_fungi:*

4: sp_human:*

5: sp_invertebrate:*

6: sp_mammal:*

7. sp_mhc.*

8: sp_organelle:*

10: sp_phage:*

11: sp_rodent:*

12: sp_virus:*

13: sp_vertebrate:*

14: sp_unclassified.*

16: sp_bacteriap:*

17: sp_archeap:*
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52.984 Million cell updates/sec
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution

## SUMMARIES

NO.	Score	March I	Length	BC	ID	Description
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5		88.9	213		OGAXYS	hrassica
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11	6.5	86.7	370	10	Q9М9G2	©9m9q2 arabidopsis
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## ALIGNMENTS

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P Applified consensus gene markets. Tools doulgaing for a genetic map

of Arabidopsis-known-function genes in Brassica.";

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EMEL; AF20908; AAKOO662.1; -

DR Pfam; PF00487; FA desaturase; 1.

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Spermatophyta, Maynoliophyta, modiomtyledons, core eudicots, Ros
eurosids II, Brassicales, Brassicacede, Brassica.
NCBI_TaxID=3708;
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Etkarycta; Viridiplantae, Otroposphyta, Enkry phyta, Trachecphyta;
Spermatophyta, Magnoliophyta, rocki objection, core editote, Ecoldae;
eurosids II, Brassicales, Brassicaceae, Erassica.
NCBI_TaxID=3711;
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(TrEMBbrel. 17, Last sequence update)
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6; Mismatches
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O1-JUN-2001 (TrEMBLrel 17, Created)

O1-JUN-2001 (TrEMBLrel 17, Last sequence update)

O1-JUN-2001 (TrEMBLrel 17, Last sequence update)

O1-JUN-2002 (TrEMBLrel 21, Last sequence update)

O1-JUN-2002 (TrEMBLrel 21, Last sequence update)

O1-JUN-2002 (TrEMBLrel 21, Last sequence update)

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ON FAD6-BO-1.

ON FAD6-BO-1.

ON FAD6-BO-1.

ON Exassication olderacea (Cauliflower).

ON Exassication olderacea (Cauliflower).

ON Exassication olderacea (Cauliflower).

ON Comparatorphyta; Magnoliophyta, Suddictyledins, Tokasophyta;

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ON OCCUPATION OF TAXID-3712,

ON OCCUPATION OF TAXID-3712,
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Q1-JUN-2001 (TrEMBLrel. 17, Created)

Q1-JUN-2001 (TrEMBLrel. 17, Last sequence update)

Q1-JUN-2001 (TrEMBLrel. 17, Created)

Q1-JUN-2001 (TrEMBLrel. 17, Last sequence update)

Q1-JUN-2001 (TrEMBLrel. 17
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                                                                                       Fourmann M., Froger N., Brunel D.,
"Amplified consensus gene markers: Tools designing for of Arabidopsis-known-function genes in Brassica "; Submitted (JAN 2000) to the EMBL/GenBank/DDPJ darabase; SMBL; AF2203R0; AAF00FF1.1; InterPro; IPP001225; FA_desaturase; PF0004R7; FA_desaturase; 1
ProDom; PF004R7; FA_desaturase; 2.
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Bentley S.D , Ch
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Hopwood D A.,
Complete genome sequence of the model actinomycete
"Complete genome sequence of the model actinomycete
coelinolor A3'2) ";
Nature 417:141:147(2002).
EMBL, A5136500; CAR66176.1, -.
EMBL, A5136500; CAR66176.1, -.
SECUENCE 148 AA, 16191 MW; C7212463DFIBID5C CRC6
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Pham X -Q T , Frwin A L , Mizoguchi S D , Warrener P., Brinkman F S L , Hufnagle W O , Kowalik D J., Lagrou M., Goltry L., Tolentino E , Westbrook-Wadman S , Yuan Y., Coulter S.N., Folger F F , Kas A , Larbig K., Lim R.M., Spencer D.H., Wong G.K. C., Wi Z., Paulsen I.T., Sier M H , Hantick F E W , Lary S , Olson M V.; Inome seguence of Pseudomonas aeruginosa FAC1, an
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Q9M9G2 PRELIMINARY; PPT; 370 AA

Q9M9G2,

O1-OCT-2000 (TrEMBLrel 15, Created)

O1-OCT-2000 (TrEMBLrel 15, Created)

O1-JUN 2002 (TrEMBLrel 21, Last annotation update)

E14C13.11 picts thaliana (Mansered cress)

E14C13.22 pictsin

E14C13.12 pictsin

E14C13.23 pc

Exharyota, Viridiplantan, Streptophyta, Embryophyta, Trach

Spormatophyta, Magnoliophyta, eddicatede; Arabidopsis.

ONCBI_TaxID=3702;

SEQUENCE FROM N.A.

STRAIN=CV. COLUMBIA;
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CSWNYC, CYMNE, 2002 (TrEMBLES 20, Created)

CL MAR 2002 (TrEMBLES 20, Created)

CL MAR 2002 (TrEMBLES 20, Cast sequence

OL-JUN-2002 (TrEMBLES 21, Last annotation

Capra bircus (Goat)

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1 SIMILAPITY COMTAINS 7 WE REPEATS (TEP-ASE DOMAINS).

EMBL, ACC12654, AAF43237 1; -.

INTERPTO; IPRO01680; WD40.

Pfam; PF00400; WD40; 7.

PRINTS; PR00320; WD40; 7.

EMBLITE, SM00320; WD40; 7.

EMBLY SM00320; WD40; 7.

EMBLY SM00320; WD40; 7.

EMBLY SM00320; WD40; 7.

PROCITE; ESECCE; WE REFEATS 5: ESIGN, 1.

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Hypothetical protein.
SSIDEDIE 4.7 AA, 47731 MW 31 TO TELLANDON.
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                                                                                                                                                                                   Similarity
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D , Lee J M., Quach H L., Toriumi M., Yu G , Rowser L.,
Chen H., Chenk P , Hayashiraki Y , Ishida J , Jones T.,
Karlin-Noumann G., Kawai J , Kim G , Lam P , Lin J.,
Marusaka M , Mguyen M , Palm G J , Sakurai T., Catou M.,
inn P , Southwick A., Shinoraki K , Davis R.W., Ecker J.R.,
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larity 100.0%; Pred. Mo. 79;
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RX MEDLINE-216569R3; PhbMed-1179R182;
RA Stoilov F., Castren E., Stamm S.;
RT "Analysis of the Human TrkB Gene Genemic Organization Pevals Mc TrkB Isoforms, Unusual Gene Length, and Splicing Mechanism.";
RI TrkB Isoforms, Unusual Gene Length, and Splicing Mechanism.";
REMBL; AF410902; AAL6796R 1; -
DR InterPro, IPR000372; LRR Nterm
Pfam; PF01462; LRRNT; 1.

W Beceptor; Kinase.
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C Q95K65;

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Fukaryota; Motaroa; Chordata;
Mammalia; Eutheria; Primates;
NCBI_TaxID-9606;
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PSEQUENCE FROM N.A.

WEDLINE 21656983; PubMed 11798192;

IA Stoilov P., Castren E., Stamm S.;

WEDLINE 21656983; PubMed 11798192;

IA Stoilov P., Castren E., Stamm S.;

WEDLINE 21656983; PubMed 11798192;

IT TAMALYSIS of the Human TAKB Gene Genemic Cryanization Reveals Movel

TYPE INTERPOORER; Unusual Gene Length, and Splicing Mechanism.";

IA FINCH Eliphys Proc.

IP POORER; IPPOORER; IG

PROC.

INTERPOORER; IPPOORER; IG

REMBL; AF410900; AAL67966.1; -.

REMBL; AF410900; AAL67966.1; -.

REMBL; AF410900; IPPOORER; IG

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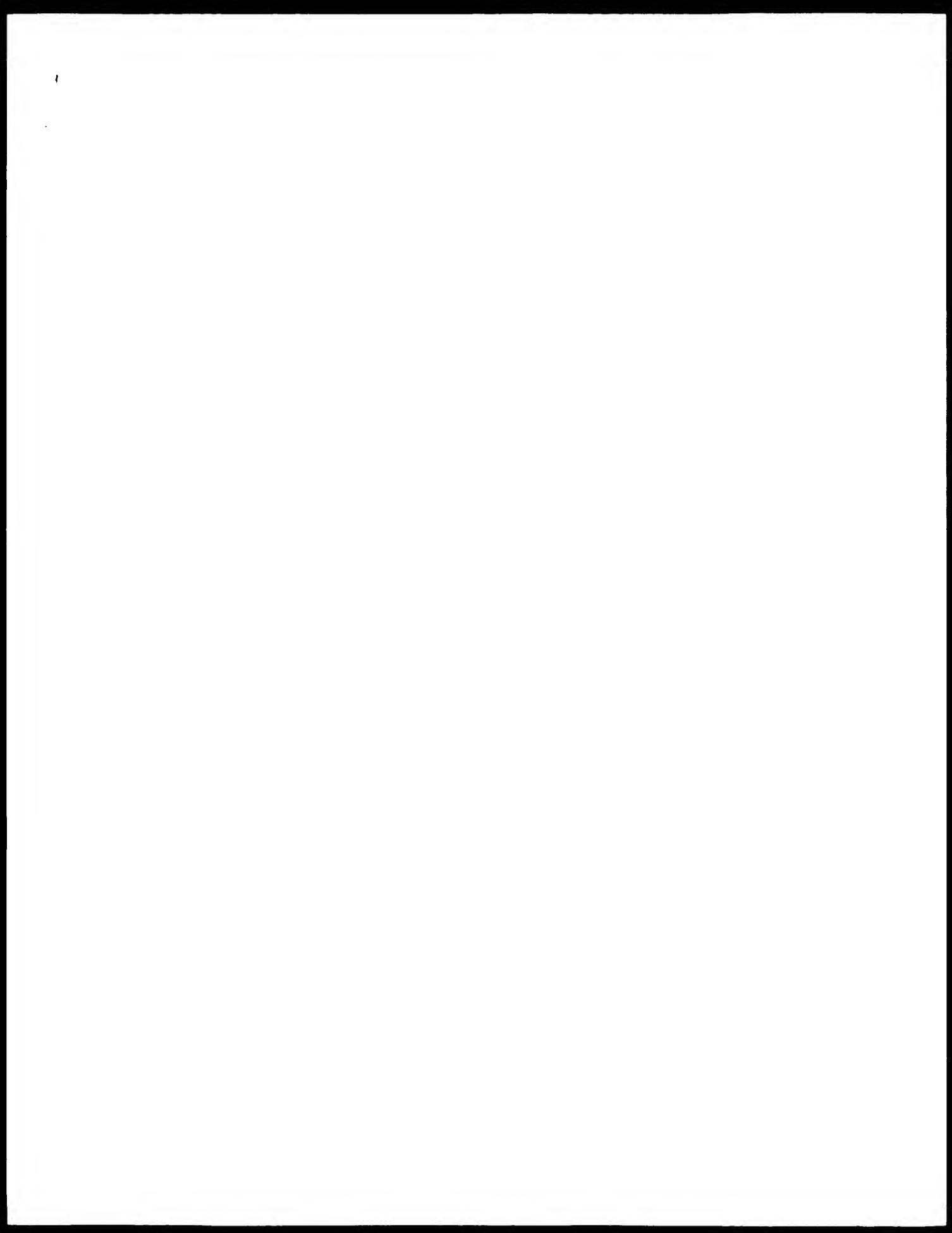
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1107, A., Author H., G., Daniell, C.J., Dennie, F.E.; Oner, A.D.; Elhardt, H.; I v., T.M.; D.;

1108, A., Reference sequence of Halobacterium species NBC-1.
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RESULT A
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hypothetical protein Y1091 - Yersill
C;Species, Yersinia pestis
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C;Cate Colse 1999 #sequence revision of Septimon, T14724; T15006
R;Hu, F, Flicht, J, McCready, F, Skowtonski, E, Sasubmitted to the EMBL Data Library, March 1998
A;Description: Structural organization of virulence det A;Reference number: Z18168
A;Status, greliminary, translated from GB/EMBE/CDBG
Thoule type: DNA
                                          C;Accession: S08449

R;Renaudin, J.; Aullo, P.; Vignault, J.C.; Bc

R;Renaudin, J.; Aullo, P.; Vignault, J.C.; Bc

Nucleic Acids Res. 18, 1293, 1990

A;Title: Complete nucleotide sequence of the A;Reference number: 508447; MUID: 90206799; PN

A;Reference number: 508447; MUID: 90206799; PN

A;Accession: S08449

A;Status: translation not shown

A;Molecule type: DNA

A;Residues: 1-78 <REN>
                                                                                                                                                                                                            RESULT 9
S08449
hypothetical protein 9 - spiroplasma virus
C;Species: spiroplasma virus 1, SpV1
C;Date: 30-Jun-1991 #sequence_revision 30-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Cross-references EMRL-AFOS1047; NID 32996296, PID 328;Lindler, L.E.; Plano, G V ; Burland, V ; Mayhew, G F Infect. Immun. 66, 5731-5742, 1998
A;Title: Complete DNA sequence and detailed analysis of A;Reference number: Z18268; MUID:99043898; PMID:9826348
A;Accession: T15006
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C;Genetics:
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A;Status: preliminary
A;Molecule type: DNA
A;Pesidues: 1-73 <KUR>
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A;Genome:
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A; Residues: 1-76 - LIN-
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                      ;Genetics:
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Science 277, 1453-1462, 1
A; Title: The complete ger
A; Poference number: A6477
A; Accession: A64750
A; Status: nucleic acid se
A; Molecule type DNA
A; Residues: 1-79 < BLAT>
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Pose, D.J
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A;Molecule type: DNA
A;molecules: 1-83 <KU
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A; Liu, F; Woll
Science 294, 2323.
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C;Species: Agrobacterium tumefaciens
C;Date: 20-Sep-2001 #sequence_revision 20 Cep 2001 #text_change 11 Tan 2000
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A;Experimental source: strain K-12, substrain MG1655
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A;Accession: A9756
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Wollam, C; Allinger,
323-2328, 2001
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A64720; MUID-97426617; PMID-9278503
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Escherichia coli plasmid p0157

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RESULT 14

S37509

Ig kappa chain V region (V kappa 2) - human (fragment)
C;Species: Homo sapiens (man)
C;Date: C6-Jan-1995 #sequence_revision 06-Jan-1995 #text_charge
C;Accession: S37509
R;Klein; U:; Kueppers, R.; Rajewsky, K.
submitted to the EMBL Data Library, September 1993
A;Description: Human IgM(+) IgD(+) cells, the major B cell subse
A;Reference number: S37509
A;Reference number: S37501
A;Accession: S37509
A;Status: preliminary
A;Residues: 1-92 <KLE>
A;Cross-references: EMBL_T26603, MID.g405659, FIEM.CAA81356.1;
C;Superfamily : Trrin-g1-F.lin V :egi.h, Immun.globulin
C;Keywords: heterotetramer; immunoglobulin
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H86753

prophage pi2 protein 25 [imported] - Lactococcus lactis subsp. lact
C;Species: Lactococcus lactis subsp. lactis
C;Date: 23-Mar-2001 #sequence_revision 23-Mar-2001 #tuxt_change 03-C;Date: 23-M
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Riling, R.; Easton, A.J.; Pringle, C.R.
J. John Will. 79, 1709-1715, 1992
A;Title: Sequence analysis of the 22K, SH and G genes of turkey rhinotracheltis virus A, heference hunker filler, MIII.3233251, EVII 1703697
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#### SUMMARIES

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CHARLES LANGER (White-field Shrew).

Charles Lange (Mordata) Craniata) Vertebrata; Buteleostomi;

Charles Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;

Charles Manmalia; Eutheria; Insectivora; Scrividae; Crocidura.

NCBI_TaxID=36802;

N(1)

N(1)

NCBI_TaxID=36802;

N(1)

SEQUENCE FROM N.A.

TISSUE=Muscle;

Charles From N.A.

MEDLINE=95345091; PubMed=7619817;

ABArchan D. Ovadia M., Kochva F., Fuchs S.;

The binding site of the nicotinic acetylcholine receptor in animal process resistant to a pha-bungarctoxin.";

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EMBEL, AECOCI23; AAC72352.1; -.

EMBEL, De3536, EAAC72352.1; -.

ECOGene, EG14283; ykfF.

Hypothotical profess, Complete proteome.

SEQUENCE /9 AA, yould MW, bidLb5/49/21A234A CRC64;
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Enkaryora; Metazoa; Chordata, Craniara,
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Matches
[1]
SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
STRAIN-ATCC 29342 / M129;
MEDLINE=97105885; PubMed=8948633;
Himmelreich R., Hilbert H., Plagens H., Pl
Herrmann R.;
Geruence analysis of the genome
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Grego: J., Davis N.W.,
Mau B., Shao Y.;
"The complete genome s
Science 277.1453 1474;
[2]
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YG50_MYCFN
P75147;
16.0CT.2001 ()
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EMBL, AE(0)349, -, NUT ARDOTATEL CDS

EcoGene; EG13309; ypjI.

Hypothetical protein; Complete proteome.

SEQUENCE 90 AA; 18070 MW; EIGTERFFCZEREF67 CP064;
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SEQUENCE FROM N.A
STRAIN-K12 / MG1655;
MEDLINE=97426617; PubMod-9278503;
MEDLINE=97426617; PubMod-9278503;
Blattner F F , Plunkett G III, Bland C A , Forma N.T., Mayhew G.F.,
Blattner F F , Plunkett G III, Blaner J.D., Bode C K., Mayhew G.F.,
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Rudd K.E.;

Unpublished observations (JAN-1999).

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OF THE TITLE OF THE TANDARD, TRY, 106 AA.

OF 15 JUL 1978 (Rel. 36, Created)

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Haemophilus influenzae.

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MEDLINE=87260937; PubMed=3037534;

Laddaga P A , Chu L , Misra T P , Silver S.;

"Nuclectide sequence and expression of the mercurial term
operon from Staphylococcus aureus plasmid p1258.",

Proc Natl Acad Sci. U.S.A. 84:5106-5110(1987).

- '- FUNCTION, INVOLVER IN MERCURIC TRANSFORT PASSES A H
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MEDLINE=88144476; PubMed=3125551;
Milson M.R., Middleton D., Warr G.W.;
"Immunoglobulin heavy chain variable region and family relationships of two genes and a fish.";
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NORT_TaxiD:e606;

N MEDLINE=86177570, PubMed=3083417;

N Girlk FlR., Carson D.A.;

"Cloning and sequence determination of a burnet thewastoid factors to build generally.

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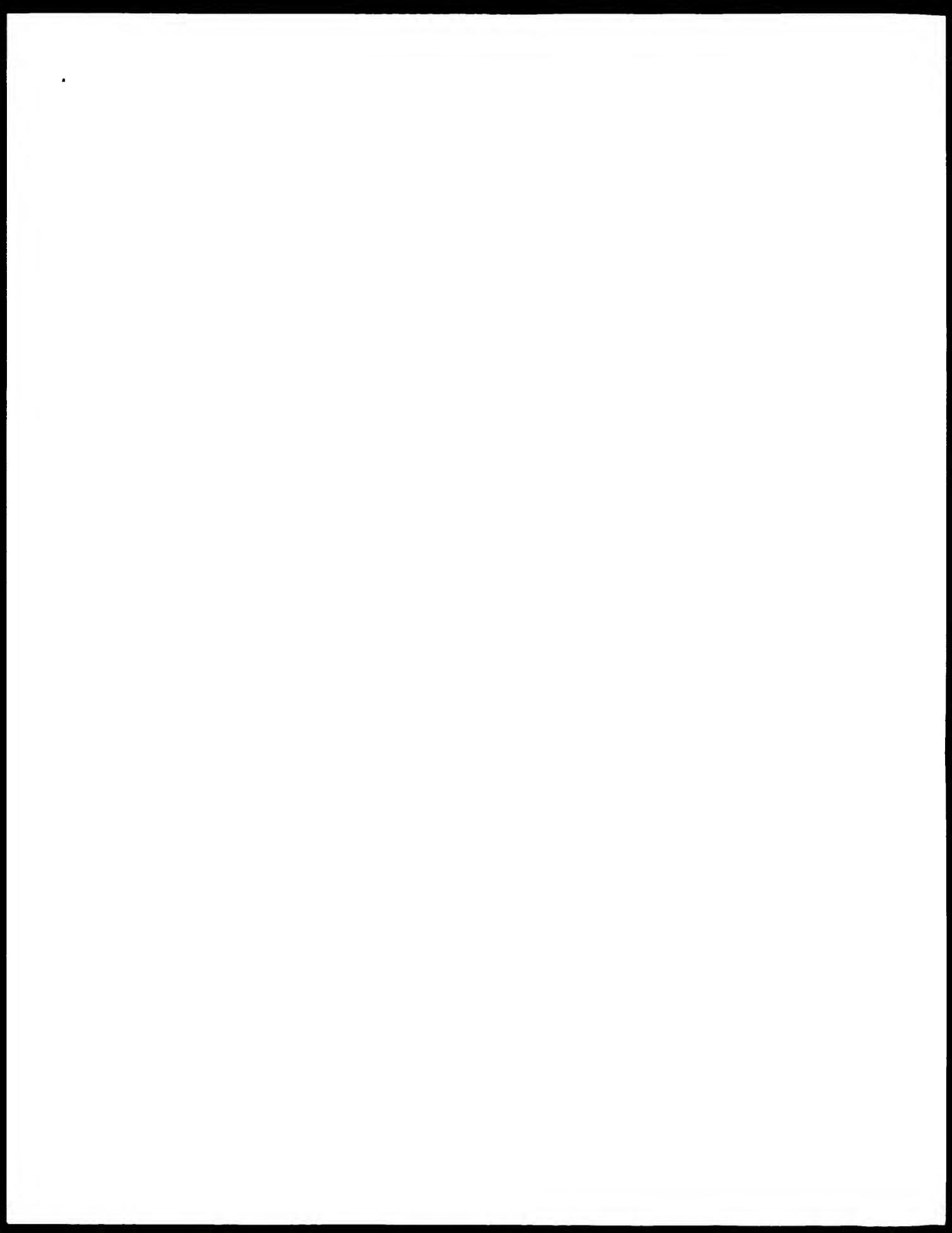
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STRAIN-ATCC 29342 / M129;
MEDLINE=97105885; PubMed=8948633;
Himmelreich R., Hilbert H., Plagens H., Pirkl E., Li B.-C.,
Herrmann R.;
"Complete sequence analysis of the genome of the bacterium Mycoplasma
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Hypothetical protein; Complete proteome.
SEQUENCE 138 AA; 15763 MW; F523805428F42709
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Bacteria; Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma.
NCBI_TaxID=2104;
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## ALIGNMENTS

RESULT Q94NH2 ID Q9 AC Q0 DT 01 DT 01	4d 50	Ma	SQ	127	DR TR	RT	RT	PA	<b>\$</b>	पुष्ठ	R C	0 <b>X</b>	Ü	00 1	3	) ()		DT	DT	AC	ID	N) (A
HIT 2 H2 Q94NH2 FRELIMINARY; PRT; 31 AA. Q94NH2, Q1-DEC-2001 (TrEMBLrel. 19, Created) 01-DEC-2001 (TrEMBLrel 19, Last sequence update)	WXXWXF 6   .:   :   WSVWTF 15	Cuery Match 100.0%, Score 6, DR 6, Length 28; Best Local Similarity 50.0%; Pred. No. 1.7e+03; Matches 3; Conservative 3, Mismatches 0, Indels 0; Capo	ŪENCE 28 AA; 3	ER 28	-1998)	is.";	haracterisation of lysozym	r U	=BLŌ⊙D;	SEQUENCE FROM N.A.		TaxID=89462:	Bovinae; Bubalus.	; Eutheria; Cetartiodactyla; Ruminantia; Pec	Motazoa Chordata Cramiata Vertehrat	Bubalus bubalis (Domestic water buffalo).	(TOPENSELTEL	-AUG-1998 (TrEMBLrel. 07, Last sequence update)	-AUG-1998 (TrEMBLrel. 07, Created)	823	6282	1

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Q63365

Q63365;
Q1-NOV-1996 (TrEMBLrel. U1, Created)
C1-NOV-1996 (TrEMBLrel. 01, Last sequence up
C1-MAR 2002 (TrEMBLrel. 20, Last annotation
Transforming oncogene NEU (Fragment).
Rattus norvegicus (Rat).
Enkaryota, Motaroa, Chordata, Craminata, Vort
Mammalia, Eitheria, Rodentia, Sciurognathi,
NCBI_TaxiD=10116,
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SEQUENCE FROM M.A.

MOYAD P., ROLAD ALTAYER E.;

Submitted (SEP-2000) to the E.

EMBL, AF416614; AAL17810 t.

EMBL, AF416615; AAL17812.1; -

InterPro; IPR002429; Cyt_d_ox

Pfam; PF02790; COX2_TM, I.

Mitochendrion

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31 31

JECTINTE 31 AA, 3600 MW,
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Cytochrome oxidase sub-mi
Littorina Lukatili
Mitochondrion.
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                                 Cranista, Vertebrata,
Sciurognathi, Muridae,
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bittorimidae;
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M'Fele F., Huiudu T.,
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                 RESULT 6
Q9NRC0
ID Q9MRC0
AC Q9NRC0;
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A White M.R.-A., Hung M.-C.;

"Cloring and characterization of the mouse new promoter.";

"TYROSINE PHOSPHATE.

"TYROSINE PHOSPHATE.

"TYROSINE PHOSPHATE.

"TYROSINE PHOSPHATE.

"TO HOMAN CERB B-2/HER-2.

"THE SIMILARITY. EQUIVALENT TO HOMAN CERB B-2/HER-2.

"EMBEL; MELIZE; CAA46966.1; -.

"EMBEL; MELIZE; CAA46966.1; -.

"EMBEL; MELIZE; CAA46966.1; -.

"EMBEL; MELIZE; CAA46966.1; -.

"TYROSINE PHOSPHATE.

"Transmemblane, Glydopidtelin, Duplication; Receptor; Transferase;
"TYROSINE PHOSPHATE, ATP binding; Phosphorylation; Oncogene.
"TYROSINE PHOSPHATE, ATP binding; Phosphorylation; Oncogene.
"TYROSINE PHOSPHATE."

"CEQUEMCE 49 AA, LOIC MW, ESCEROUSCIUMSAC CRCC4,
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Matches
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MEDLINE DICC
Suen T.C., H
"Waltiple of
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SEQUENCE FRO
MEDLINE 9117
Yan D.H., Hu
"Identificat
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Esteleostomi,
Munimalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
HOBI TaxII 10030;
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91172172, E
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04; AAA41686.1; -.
Transforming protein.
48 48
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Milit, Fulled hip3202;
Hung M.C.;
His and trans acting elements involved in regulation
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tion and characterization of a
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(Trembirel. 10, List sequence update)
ROBLACTODIO (LLUGELE D. 2 (EC 2.7.1.112) (NEU Unicogene)
Burnal growth factor receptor related protein) (Fragment)
                                                                                                                                              llarity 50.0%,
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6496, FulMed=1348855;
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3, Mismatches 0;
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MEDILINE-2036717, DubMed-10710147,

MEDILINE-20367717, DubMed-10710147,

Alvarimenta R. Alvasia M. C. Artaya J. E., Raia G. S., Baprista C. S.,

Alvarimenta R. Alvasia M. C. Artaya J. E., Raia G. S., Baprista C. S.,

Alvarimenta R. Bonaccorsi E. D., Bordin S. R., Rove J.M., Bridge R. R. R.

A Alvarimenta R. B., Camargo A. A., Camargo L. E. A., Carraro D. M., Carror H.

A Colauto M. B., Callada C., Costa F. F., Costa M. C. P., 
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SEQUENCE FROM N A
MEDLINE-20349292; PubMed=109
MEDLINE-20349292; PubMed=109
Vincent J.B , Herbrick J A
Scherer S.W.;
Scherer S.W.;
"Identification of a novel
"Identification breakpoi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q9PH20;
Q9PH20;
Q1-00T-2000 (TrEMBLrel 15, c)
01-00T-2000 (TrEMBLrel 15, c)
01-00T-2000 (TrEMBLrel 21, c)
01-00T-2000 (TrEMBLrel 21, c)
01-00T-2000 (TrEMBLrel 21, c)
01-00T-2000 (TrEMBLrel 31, c)
01-00T-2000 (TrEMBLr
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01-0CT-2000 (TrEMBLES)
01-DEC-2001 (TrEMBLES)
FAM4A1 (Fragment)
FAM4A1.
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EMBL; AF
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Mammalia, Eutheria,
NCBI_TaxID=9606;
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EMBL; AE003866; AAF82939.1; -.
InterPro; IPR001230; Prenyl site.
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, Plunkett G. III, Burland V., Mau B., Glasner J.D.,
Mayhew G.F., Evans P.S., Gregor J., Kirkpatrick H.A.,
Hackett J., Klink S., Boutin A., Shao Y., Miller L.,
I.J., Davis M.W., Lim A., Dimalanta E.T., Potamousis K.,
Anantharaman T.S., Lin J., Yen G., Schwartz D.C.,
, Blattner F.R.;
guence of enterchaemorrhagic Escherichia coli O157:47.
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29885; PubMed-9673266;
Mayhew G.F., Fosfai G., Ellistt G., Denmemberg M.G.,
Blattner F.R.;
2volution of a pathogenicity island from embergionerrhagis
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Colombar 2002 (TremmBrel 15, Last sequence update)

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Figure 2002 (TremmBrel 15, Last sequence update)

Colombar 2002 (TremmBrel 15, Last sequence update)

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Society 2004 (TremmBrel 20, Last sequence update)

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A Parkhill T, Wren R W. Thomson N F, Titball F W., Holden M T G, Parkhill T, Wren R W., Thomson N F, Titball F W., Holden M T G, Prentice M.B., Sebaihia M., Tames K D., Churcher C., Mungall K I., Baker S., Rasham D., Bentley S D., Brocks K., Cerdeno-Tarraga A M., Chillingworth T., Hamlin N., Holroyd S., Tagels K., Pougan G., Reltwell T., Hamlin N., Holroyd S., Tagels K., Korlyshev A V., A Learner S., Moule S., Oyston P C F., Quail M., Putherford K., Simmonds M., Skelton T., Stevens K., Whitehead S., Parrell P.G.; "Genome sequence of Yersinia pestis, the causative agent of plague ", Nature 413.523 527(2001).

R EMBL; AF073947; AAC82749.1; ...

R EMBL; AF074611; AAC82749.1; ...

W Hypotherical protein; Plasmid; Complete proteome.

SEQUENCE 76 AA; 8807 MW; 7EF44937755036BB CRC64;
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SEQUENCE FROM N.A.
SEQUENCE FROM N.A.
STRAIN-KIM10+;
(MEDLINE+99043898; PubMed-9826348;
(MEDLINE+99043898; PubMed-9826348;
(Lindler L E., Plano G V , Burland V , Mayhew G F.,
"Complete DNA sequence and detailed analysis of the
"Complete DNA sequence and detailed analysis of the
"KIM5 plasmid encoding murine toxin and capsular and
"KIM5 plasmid encoding murine toxin and capsular and
"Infect Immun 66-8731-8742(1998)
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Q1-MAY-2000 (TrEMBLrel. 13, Created)
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Hypothetical 9.1 kDa protein.
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NCBI_TaxID-632;
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SEQUENCE FROM N.A.

STRAIN-KIM5;

MEDLINE:98422474; PubMed=9748454;
Hu P., Elliort J, McCready P, Skowron:
Kobayashi A., Brubaker R.R., Garcia E.;
"Structural organization of virulence-a
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Hypothetical protein Vioni
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Sampei G., Mizobuchi K.;

Sampei G., Mizobuchi K.;

"Organization and diversification of plasmid you meso convolentide sequence of the Pion genome ";

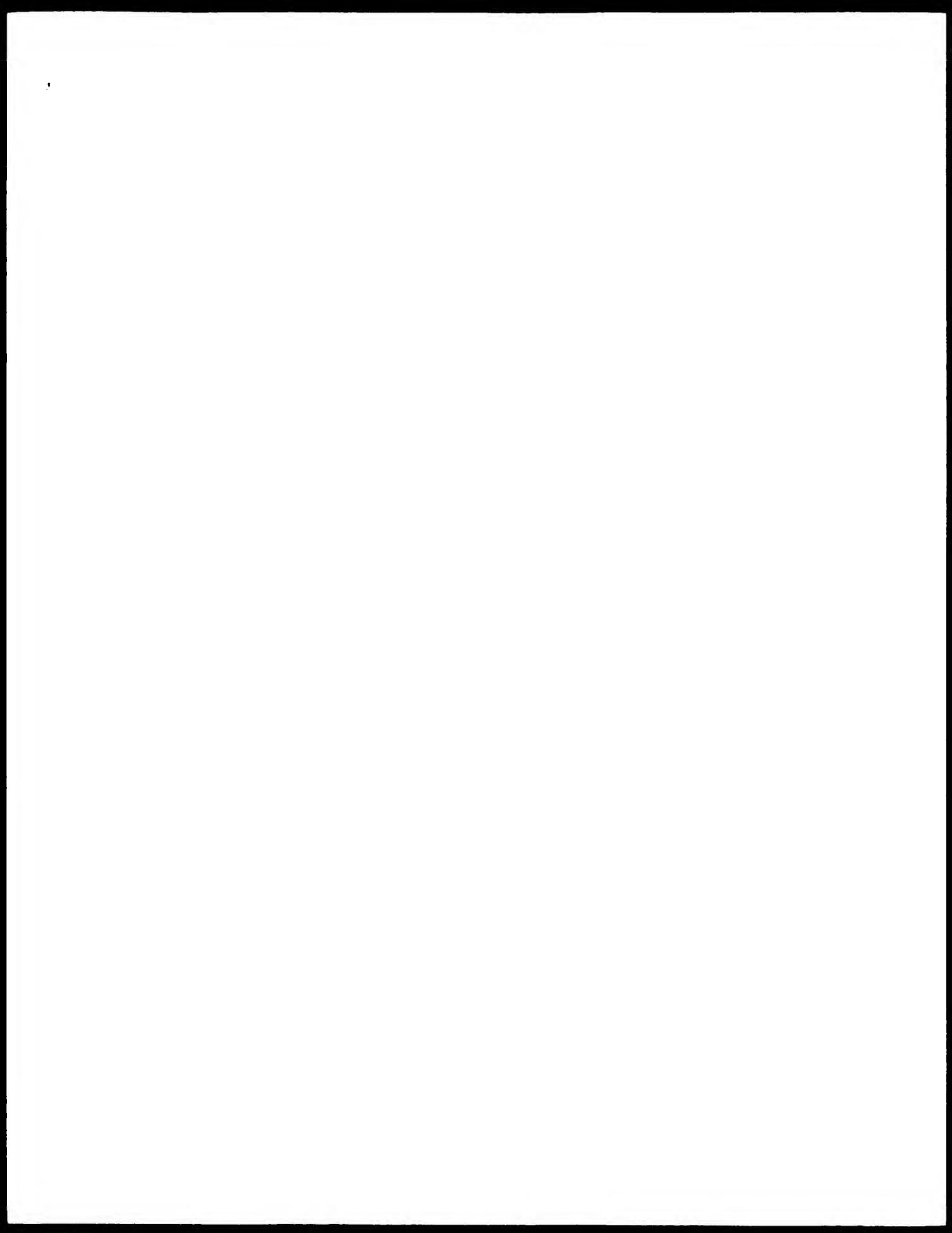
submitted (MAY-1999) to the EMPL/GenPank/DDBJ databases.

Submitted (MAY-1999) to the EMPL/GenPank/DDBJ databases.

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SETTENTE 74 KA, 4398 MW, 717594PFFFFFFFFFF Length 7
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Manwaring M.P., Skurray R.A., Firth M.;
"Nucleoride sequence of the F plasmid leading region.";
Plasmid 41:219 225(1999).
EMBL; AF106329; AAD47188.1; -.
Hypothetical protein; Plasmid.
SEQUENCE 77 AA; 9089 MW, 76745FF6757F677A 7F764;
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## ALIGNMENTS

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Disclosure;
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                                                                              WPI; 1994-260510/32.
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                                                                   e sequences given in AARE7386-413 and profit the claimed generic formula:

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CH or NH2; and
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                                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence is a polyglutamine repeat domain binding peptide. The peptide is useful for treating a cell that contains and expresses a protein having an expanded polyglutamine region (e.g. buntingtin; atrophin 1, ataxin 1, 2, 6 or 7; or androgen receptor protein), or treating a neurodegenerative disease characterised by the presence of expanded polyglutamine repeats, e.g. Huntington's disease, dentatorubral pallidoluysian atrophy (DRPLA), spinobulbar muscular atrophy, and spinocerebellar ataxia types 1, 2, 3, 6 and 7
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                                                             and an adsorbing agent prepd. by useful for treatment of diseases
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                                    protein, and so obtaining one or more inhibitory riganus, and settermining which of the inhibitory ligands can mediate a biological activity of the target protein. The present sequence represents a potential binding peptide for Haemophilus influenzae tyrosine tRNA synthetase from an example of the present invention. The method can be used for identifying drugs which can mediate the biological activity of a target protein. It can be used to identify the biological activity of a target protein whose biological function is not known and perhaps cannot be determined directly. The method can also be used to identify new inhibitory ligands of specific target proteins. The method provides high throughput screens which are essentially identical for similar and be the second to target proteins.
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### ALIGNMENTS

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hypothetical protein PHI454 - Pyrodoccus horikoshii C.Species: Pyrodoccus horikoshii C.Species: Pyrodoccus horikoshii C.Species: Pyrodoccus horikoshii C.Species: 14-Aug 1398 #sequence_revision 14-Aug 1398 #text_ubang. 20 iin 2000 C.Accession: A71020

P.Kawarabayasi, Y.; Sawada, M.; Horikawa, H.; Haikawa, Y.; Hino, Y.; Yamamoto, S.; Seking M.; Chfuku, Y.; Finahashi, T.; Tanaka, T.; Fidih, Y.; Yamamaki, Y.; Yamamoto, S.; Seking M.; Chfuku, Y.; Finahashi, T.; Tanaka, T.; Fidih, Y.; Yamamaki, Y.; Yamamoto, S.; Seking M.; Complete sequence and jene urganization of the general for hyper thermophalic at A,Reference number. A71000, MUID.20344137, EMID.2073124

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A,Residues, 1-241 **CANA**

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A,Reperimental source: Strain OT3

A,Gene: PHI454
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C;Species: Mycobacterium tuberculosis
C;Date: 17-Ju1-1398 #segmence_revision 17-Ju1-1338 #text_change 25-Ju1-2000
C;Accession: D70847
C;Accession: D70847
R;Cole, S.T.; Brosch, R.; Parkhill, J.; Garnier, T.; Churcher, C.; Harris, D.; Gordon, S.; Connor, P.; Davies, P.; Davlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, S.; Connor, P.; Davies, P.; Davlin, K.; Feltwell, T.; Gentles, S.; Hamlin, N.; Holroyd, S.; Pajandream, M.A.; Pogers, J., Futter, S.; Seeger, V.; Shelton, C.; Taylor, S.
R;Authers: Squres, E.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
A;Authers: Squres, P.; Sulston, J.E.; Taylor, K.; Whitehead, S.; Barrell, B.G.
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A;Experimental source: strain H37RV
C;Genetics:
A;Gene: Rv0059
C,Superfamily: Myccbacterium tuberculusis hypithetical pritein Fv0059
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Nature 406, 959-964, 2000

A; Title: Complete 300.70 beganing of Familias actujinous fayacession: A82999

A; Reference number: A82950; MUID: 2043/337; PMID: 10984043

A; Accession: A82299

A; Status: preliminary

A; Molecule type: DNA

A; Residues: 1-293 <STO>

A; Experimental source: Strain PAO1

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C;Specier Titlines probable pallidam (syphilis opi)
C;Specier 24-Jul-1909 #ccquence_revision 24 Jul 1908 #csxt[shi
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R;Frasel, G.M., Molilo, J.J., Weinstock, J.M., White, J., Interpretation 24 Jul 1908 #csxt[shi
rson, J.; Elalak, H., Birharden, L., H.well, J.Y., Induce
they, L.; Weidman, J.; Smith, H.O.; Venter, J.C.
Science 281, 375-388, 1998
A;Title: Complete genome sequence of Treponema pallidum, the
A;Reference number. A71250, MUID, J8332770, FMID, J8532470,
A;Residues: 1-260 /CGD.
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A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-358 <STO
A;Cross: references: 3E: C;Genetics: 1,5-11, 750378
                                                               A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-386 <KU
A;Crops-references: C
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A; Title: Complete Schume Sequence of Caulibration proceeding.

A; Reference sumber. A87240, MUID.21173698, FMID:11259647

A; Starne- mr. 12
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T; Eare 1: Tep 1944 #ceq.escentus
T; Eare 1: Tep 1944 #ceq.escentus
T; Accession: 243876
E; Tweiger, C., Marchynski, G., Chapiro, D.
J. Mol. Biol. 235, 472-485, 1994
A; Title: A Caulobacter DNA cethyltransferace that function
A; Reference number: S43876
A; Accession: S43876
A; Status: preliminary
    A;Gene:
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R;Goodner, B.; Hinkle, G.; Gattung, S.; Miller, A., Liu, F., Wellam, J., Allinger, M., Erajhi; Crience 204, 2023 2028, 2001
A;Title. Genome Sequence of the Flant Fathogen A;Reference number: A97359; PMID:11743194
A;Accession: A97456
A;Status: preliminary
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C;Species: Gaulobacter crescentus
C;Date: IO Apt ICII #Ergueble_:emision (incompanies)
C;Accession: A87296
R;Mierman, W.C.; Feldblyum, T.V.; Paulsen,
b.; Laub, M.T.; Leboy, S.T.; Ludon, S.J.
p.; Jaub, M.T.; Leboy, S.T.; Ludon, S.J.
p.; J.; Etholacva, M.; White, O.; Salbhetg;
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A;Residues: 1-358 <ZWE>
A;Residues: 1-358 <ZWE>
A;Residues: 1-358 <ZWE>
A;Cross-references: EMBL U01032, NID.g393011, PIDN.AAA18913.1; PID:g393
A;Cross-references: EMBL U01032, NID.g393011, PIDN.AAA18913.1; PID:g393
C;Coperfamily: site specific DNA meth;ltransferase (adenine specific) H;C;Coperfamily: meth;ltransferase, restriction modification system
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J., Allinger, M., Toughi, T., T., T., C., Lappac, C., Markel
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A; Gene: Atu0794
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C; Superfamily. s
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C;Species: nucleomorph Guillardia theta
A;Note: a nucleomorph is the vestigial nucleus of a cukaryotic endosymbiont
C:Date: 10-May 2001 #sequence_revision 10-May-2001 #text_change 24 May 2001
C;Accession: D90105
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A; Experimental source:
C; Genetics:
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A;Accession: AD2674
A;Status: prelimin-
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A;Authors: You, H., Tau, Y., Biddle, F., June
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A,Molecule type. DNA
A,Residues: 1-394 - DOU-
                                                                                                                                                                                                        R;Dourles, S.; Zeumer, S., Ettichelt, M., Reiten, M., Se
Nature 410, 1091-1096, 2001
A;Title: The highly reduced genome of an enslaved algal
A;Peference number: A99082; Mulp:11323671; PMID:11323671
A;Accession: 590105
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A, Cross referen
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A:Residues: 1-386 <KUR>
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A; Genome: nucled
C; Keywords: nucl
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C,Date: 27-Mey-2003
C;Accession: AH1783
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A;Gene: BMEI1444
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A;Map position: I
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R;DelVecchio, V.G.;
Mazur, M.; Golts
Prog Natl Acad. S
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R;Glaser, P; Frangeul, L;
R; Dominguez-Bernal, G; D:
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A;Molecule type. DNA
A;Residues: 1-423 <G
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C, Date: 27-Kby 2001 #sequence_revision 17 Nov 2011 #text_change 14 low 1
C;Accession: AH1407
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A,Molecule type: DNA
A;Residues: 1-403 <KUR>
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A;Cress:references: 38
A;Experimental source:
C;Genetics:
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A,Feference number: AB1077, MTTD 21037279, FMID 11679669
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Science 294,
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Isman, E.; Selkov, E.; Elzer, P.H.; Hagius, S.; Ordallaghan, D.; La
Smi T.S.A. 99, 443-448, 2002
ne sequence of the facultative intracellular pathogen Brucella nels:
C: AD3252; PMID:11756688
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P;Glaser, D; Frangeul, I; Buchaud, E; Durand, A; Baquer, F; Dominguez-Bernal, G; Duchaud, E; Durand, L; Duswurget, O; Ent Science 194, 849-852, 2001
A,A.thi: Kreft, J; Kihn, M; Kinn: F; Eliphat, G; Madich, E; Science 194, 849-852, 2001
A,A.thi: Kreft, J; Kihn, M; Kinn: F; Eliphat, G; Madich, E; Ok, C; Schluster, T; Simoes, M; Ticrez, A; Varquez Boland, J;A; A; Ticle: Comparative grillis : £ Listerila species.
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Cpaces: desaturase, chloroplast - soybean
Cpspecies: Glycine max (soybean)
Cpate: 14 May 1999 #coquence_revision 14 May
Cpate: Physiol. 105, 635-641, 1994
A;Title: Cloning of a higher-plant plastid om
A;Reference number: Z16109; MUID:94345008; PM
A;Recession: T07742
A;Status: preliminary; translated from GB/EMB
A;Recidues: 1-424 <HIT>
A;Cross: references: EMBL:129215; NID:9459961;
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FD6C_SOYBN STANDARD, PRT, 424 AA

P48628;

01-FEB-1996 (Rel. 33, Last sequence update)

01-FEB-1996 (Rel. 33, Last sequence update)

15-JUN-2002 (Rel. 33, Last annoration update)

Omega-6 fatty acid desaturase, chloroplast procursor (EC 1.14.99..).

Glycine max (Soybean)

Glycine max (Soybean)

Eukaryota, Viridiplantae, Otroptophyta, Embryophyta, Trach-ophyta;

Spermatophyta, Magnoliophyta, eudicotyledons; core eudicots; Posidae,
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PRINTS; PRO0508; S21N4MTFRASE.
PROSITE; PS00092; N6_MTASE; 1.
Transferase; Methyltransferase;
SFQUENCE 377 AA; 42202 MW,
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Nature 408:823-826(2000).
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protein At5g27120.
TMC21BC4 12 OF T21B4_30.
thaliana (Mouse-ear cress).
tridiplantae, Streptophyta, Embryophyta, Tracheophyta;
a, Magnoliophyta, eudicotyledons, core cudicoto, Ecsidae;
Brassicales; Brassicaceae; Arabidopsis.
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asortium (Salk/Stanford/PGEC).";
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EMBL; AL022198; CAA18198.1; -.
EMBL; AL161578; CAB79813.1; ..
EMBL; AY045621; AAK73979.1; ..
EMBL; AY058078; AAL24186.1; -.
EMBL; AY059852; AAL24240.1; ..
InterPro; IPP001225; FA_desaturase.
Pfam; PF00487; FA_desaturase; 1.
ProDom; PD001081; FA_desaturase; 1.
Ovidoreductase; Fatty acid bicsynthesis, Chloroplast, Mel
NCBI_TaxID=303;
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[SQUENCE FROM N.A.
STRAIN=Corvallis;
MEDLINE=98019091; PubMed=9358059;
Kim Y C , Miller C D , Anderson A J.;
"Identification of adjacent genes encoding the bacterioferritin from the plant-beneficial bacterioferritin from the plant-beneficial bacterida.";
Gene 199:219-224(1997)
[CETMITICM DECOMPTES HYTEOGRAFERING FERTXIPE TO PROTECT SELLS FROM THE TOMIC REPORTE TO ACTIVITY: 2 H(2)0(2) - 0(2) + 2
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R HSSF, F42321, 2CAE.

InterPro; IPR002226; Catalase.

Pfam; PF00199, catalase, 1.

PFRINTS; PR00067; CATALASE.

PROSITE; PS00437; CATALASE 1; 1.

PROSITE; PS00438; CATALASE 2; 1.

Oxidoreductase, Peroxidase, Iron, Heme, Hydrogen peroxide.

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PROXIMAL HEME LIGAND (BY SIMILARIES BINDING 336)

SEQUENCE 479 AA, 53381 MW; EFE3CBDE67778571 CRC64;
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Q12460;

C 01:NOV-1997 (Rel. 35, Created)

C 01:NOV-1997 (Rel. 35, Last sequence update)

C 15:JUN:2002 (Rel. 41, Last sequence update)

SIK1 protein (Nucleolar protein NOP56).

SIK1 OR NOP55 OR YER197W OR L8167.9.

Saccharomyces cerevisiae (Raker's yeast).

Saccharomyces cerevisiae (Raker's yeast).

Saccharomycetales; Saccharomycetaceae; Saccharomyces.

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CHARACTERIZATION, AND MUTAGENESIS.
MEDLINE-98038777; PubMed-9372940;
Gautier T., Berges T., Tollervey J., Hurt E.;
"Nucleblar KKE/D repeat proteins NopECp and NopEep and are required for ribosome biogenesis.";
Mol Cell Biol 17 7088-7098(1997).
                                                                                                                                    STRAIN=S288c / AB972;
Johnston M., Andrews S., Brinkman R., Cooper J., Ding H., Du Z.,
Johnston M., Andrews S., Brinkman R., Cooper J., Ding H., Du Z.,
Favello A., Fulton L., Gartung S., Green T., Kirsten J., Kuraba T.,
Hallsworth K., Hawkins J., Hillier L., Jier M., Johnson D.,
Johnston L., Langston Y., Latreille F., Mardis E., Menezes S.,
Miller N., Nhan M., Pauley A., Peluso D., Rifken L., Riles L.,
Taich S., Trevaskis E., Vaudin M., Vignati D., Wilcox L., Wilson R.
Wohldman P., Waterston R.;
Submitted (SEP-1994) to the EMBL/GenBank/DDBJ databases.
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STRAIN-S288c / YPH1;
MEDLINE-96040178; PubMed-7547500;
Morin F.J., Downs J.A., Shudgrass A.M., Gilmore T.D.;
"Genetic analysis of growth inhibition by GAL4-L kappa P-alpha
Saccharomyces cerevisiae.";
Cell Growth Differ. 6:789-798(1995).
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MOPSP is a small nucleated in yeast.";

PNOPSP is a small nucleated in yeast.";

C. Biol. Chem. 273:16453-16463(1998).

C. Biol. Chem. 273:16453(1998).

C. Biol. Chem. 273:16463(1998).

C. Biol. Chem. 2
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EMPI, AECCECTO, AACDM84.1; -.

EMPI, AECCECTO, AACDM84.1; -.

SAFE, CAAGDEST, NOPS.

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R ProDom; PD004104; Nop; 1.

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R ProDom; PD004104; Nop; 1.

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I Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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I TaxID-9606;
I Sequence FROM N.A.
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-!- SUBURIT: Interacts with clip submitted the contion.
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.inch.commercial)
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InterPro; IPP002687; Nop.

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Ribosome biogenesis, Nuclear protein.

Ribosome biogenesis, Nuclear protein.
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Hypothetical protein, Plasmid.
SEQUENCE 646 AA; 71609 MW, 8578F960595A355E 75064;
                                                                                                                                                                                                                                                                                                This SWISS-PROT entry is copyright It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute There are no restrictions or its use by non-profit institutions as long as its content in It no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to licenselish-sib.ch).
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MEDLINE:97305956; FubMed:9163424;
Freiberg C A , Fellay R , Bairoch A , Broughton W J , Rosenthal Perret X.,
"Molecular basis of symbicsis between Rhizobium and legumes.";
Nature 387 394 401(1997).
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Plasmid sym pNGR234a.
Bacteria, Froteobacteria, alpha subdivision,
Phizobiaceae, Phizobium
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MEDLINE 94211204, PubMed-8199165;
Daffre S., Kyleten P., Samakovlis C., B.
"The lyberyer ledus in Erosophilia melan family adapted for expression in the dromo. Gen. Genet. 242:152-162(1994).
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A Euruya D., Dato F., Tunikawa M., Yanazuki M., Sugiyunu D., Ille E.,

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A Kawai Hio Y., Saito F., Nishikawa D., Kimura E., Yamamato J., Irono Y.,

A Kanchori K., Makamara Y., Ochino M., Fili B., Marakuwa F.,

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(uctase (Fragment).
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y 66.7%; Pred. No. 2e+02;
tvative 2; Mishatches 0
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C. Michatches C.
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STRAIN-CV. STELLAR;

Fourmann M., Froger N., Brunel D.;

"Amplified consensus gene markers Tools designing for a gene markers in Brassica ";

of Arabidopsis-known-function genes in Brassica ";

Submitted (JAN-2000) to the EMBL/SenBank/DDBJ databases

EMBL; AF220301; AAK00663.1; -.

Pfam; PF00487: FA desaturase; 1.

Propom; PD001081; FA desaturase; 2.
   Query Match
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Q9AXY2;
Q9AXY2;
01-JUN-2001 (TrEMRLrel 17, Cr
01-JUN-2001 (TrEMRLrel 17, La
01-JUN-2002 (TrEMRLrel 21, La
0mega 6 reductase (Fragment) .
FAD6-BN-1.
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Q94K47;
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O1-DEC-2001 (TrEMHLrel 14, Created)
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O1-DEC-2001 (TrEMHLrel 14, Created)
O1-DEC-2001 (TremhLrel 14, C
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Eukaryhta, Viridiplantae, Streptophyta, Embrycphyta, Trackemphyta,
Spermatophyta, Magnoliighyta, eudiontyledons, onte eudio ts, Rosidae,
eurosids II, Brassicales, Brassicaceae, Brassica.
NCRI_TaxID-3708;
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01.JUN-1998
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C9AXY4;
01-JUN-2001
01-JUN-2001
01-JUN-2001
SEQUENCE FROM N.A.
STRAIN-H37RV,
MEDLINE-98295987; FubMed-9634230,
Cole S.T., Brosch R., Farkhill J., Garrier T., Churcher C., Harris D.
Cole S.T., Brosch R., Farkhill J., Garry C.E. III, Tekaia F.,
Gordon S.V., Eighmeier K., Gas S., Barry C.E. III, Tekaia F.,
Badcock K., Basham D., Brown D., Chillingworth T., Connor R.,
Davies R., Devlin K., Foltwell T., Gentles S., Hamlin H., Holtoyd S.,
Davies R., Jagels F., Frogh A., McLean J., Moule S., Murphy L.,
Cliver S., Osborne J., Quail M.A., Fajandream M.A., Fogers J.,
Rutter S., Seeger K., Skelton S., Squares S., Squares R.,
Sulston J.E., Tuylor K., Whitehead S., Barrell B.G.;
"Deciphering the biology of Mycobacterium tuberculosis from the
complete genome sequence.";
                                                                                                                                                                                                                                                                                                                                                                                                                          Hypothet
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STEAIN ON
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FAD6-BO-1.
Brassica oleracea (Cauliflower).
Brassica oleracea (Cauliflower).
Eukaryota; Viridiplantao; Streptophyta; Embryophyta; Tracheol
Eukaryota; Magnoliophyta, eudicotyledons, core eudicote;
Spermatophyta, Magnoliophyta, eudicotyledons, core eudicote;
eurosids II; Brassicales; Brassicaceae; Brassica.
NCBI_TaxID=3712;
                                                                                                                                                                                                                                                                                                                               Mycobacterium tuberculosis.
Bacteria, Firmicutes; Actinobacteria, Actinobacteridae;
Actinomycetales, Corynebacterineae, Mycobacteriaceae; Mycobacterium
NCBI_TaxID-1773;
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6 -phosphogluconslactomase like protein.

8 Alabidopsis thaliana (Monse-rat cress).

Elkaryitu, Villäiplustan, Strift-phytu, Embry-phytu, Tiucherphytu;

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MEDLINE Julobass, Fubmed-10048488;

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A tomic. Julobass, Fubmed-10048488;

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PROBLEMS 2004 (ATCC 36104 (2004))

REDILING 2014 (ATCC 36104 (2004))

REDILING 2014 (ATCC 36104 (2004))

REDILING 2014 (ATCC 36104)

REDILING 2014 (ATCC 36104)

RA Allen N., Mashaum C., Roy A., Endriczi M.G., Macdonald F., Ra Lincor I., Mishaum F., McPornan F., Talamas J., Tirrell A., Ye W., RA Allen N., Maylor J., Stinger Thomann H., DeArchland F., Johnson F., Rahame D.A., Guss A.M., RA Leigh J.A., Li W., Liu J., Mukhopadhyay R., Reeve J.N., Smith K., RA Leigh J.A., Li W., Liu J., Mukhopadhyay R., Reeve J.N., Smith K., RA Springer T.A., Unayam L.A., Mukhopadhyay R., Reeve J.N., Smith K., PA Pritchert M., Sowers K.P., Jing H., Macario A.J.L., Paulsen I., PA Pritchert M., Sowers K.P., Swanson P.V., Zinder S.H., Lander E.C., Brand G.H., Marten B., The genome of Methansarrina activo and physiological diversity",

RE and physiological diversity",

REBL, ABOLO783, AAMO483.1; -.

REBL, ABOLO783, AAMO483.1; -.

REBL, ABOLO783, AAMO483.1; -.

PROBLEMS C. 2004 AA, 10200 WW., BACTER 10, DECC4,

PROBLEMS C. 2004 AA, 10200 WW., BACTER 10, DECC4,

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Hypothetical pa?778
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STRAIN-ATCC 15692 / PAO1;

MEDLINE=20437337; PubMed=10984043;

Stover C.K., Pham X.-Q.T., Erwin A.L., Mizoguchi S.D., Warrener P., Stover C.K., Pham X.-Q.T., Erwin A.L., Mizoguchi S.D., Warrener P., Hickey M.J., Brinkman F.S.L., Hufnagle W.O., Kowalik D.J., Lagrou M. Garber P.L., Goltry L., Tolentino E., Westbrock-Wadman S., Yuan Y., Brody L.L., Coulter S.N., Folger K.P., Mas A., Larbig M., Lim R.M., Smith M.A., Spencer D.H., Wong G.K. S., Wu Z., Paulsen I.T., Reizer J., Saier M.H., Hancock R.E.W., Lory S., Olson M.V.; "Complete genome sequence of Pseudomonas aeruginosa PAO1, an opportunistic pathogen.";

Nature 406:959-964(2000).
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STRAIN=L028;

MEDLIME=21212979; FubMed+11316371;

MEDLIME=21212979; FubMed+11316371;

Saklani+Jusforgues H , Fontan E , Goossens P.L.;

Saklani+Jusforgues H , Fontan E , Goossens P.L.;

"Characterisation of a Listeria monocytogenes mutant deficient arabitol fermentation.";

Res. Microbiol. 152:175-177(2001).

EMBL, AJ292552; CAC20641.1; -.

InterPro; IPR004703, Gal_spec_IIC.

Pfam; PF03611, EIIC-GAT; 1.
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InterPro; IPR005074; Peptidase_C39.
InterPro; IPR001440; TPR.
Pfam; PF03412; Peptidase_C39; 1.
Hypothetical protein; Complete proteome.
SEQUENCE 793 AA, 30016 MW, OFA41656EFF667E1
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Bacteria; Firmicutes; Bacillus/Clostridium group; Bacillales;
Listeriaceae; Listeria.
NCBI_TaxID=1629,
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                                                                                                                                                                                                                                                                                                           Peptides which bind to the DNA binding domain of transcription factor F2F and inhibit cell cycle progression may be useful as research agents to investigate the interaction between E2F and DP-1, or the activation of transcription by E2F-1/DF 1 heterodimers. They may also be used for inducing apoptosis and/or cell cycle arrest in a cell, particularly for treatment of cancer or other proliferative disorders such as psoriasis and restenosis
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Nlzheimer's disease; multiple sclerosis; schizophrenia;
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analyzing gene expression in human placenta -
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                                                                                                                                                                                                                                                                                                                                                                                                                                           resent invention relates to single exem nucleic acid probes (DEXP: AI31315-AAI57546). The present sequence is a peptide encoded by one probe. The probes are useful for producing a microarray for other, measuring and displaying gene expression in somples devived human placenta. The probes are useful for antenatal diagnocis of genetic disorders.
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RESULT 10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           human serum albumin; HSA; cancer; reproductive disorder; digestive disorder; immune disorder; endocrine disorder; haematopoietic disorder; neural disorder; connective disorder; cytostatic; antiinfertility; antiinflammatory; antiulcer; immunomodulator, anti HIV, antidiabetic, haemostatic, nootropic; neuroprotective; antiparkinsonian; antimicrobial; neuroleptic; osteopathic; antiarthritic.
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                                                                                                                                                                                                                                                     (e.g. osteoporosis, arthritis). A fusion proteins of the invention.
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                                                                     Protein;
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Human; secreted protein; immune disorder; antiallergic; antirheumatic; rheumatoid arthritis; breast neoplasia; breast cancer; antiarthritic; neurologica, class, breast cancer; antiarthritic; children, child
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#### Homo sapiens

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An isolated nucleic acid molecule ( encodes a polypeptide useful in the disorders e g. immune disorders comprising a audit elynucleotide whi eatment of

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AAD33030 AAD33736 represent CDMAS corresponding to 21 human secreted provided provide farged to the provide the provide farged to the farged AAD21230 (AAD21230 ) represent the provide farged to the farged AAD21230 (AAD21230 ) represent the provide farged to the farged AAD21230 (AAD21230 ) represent the provide farged to the farged AAD21230 (AAD21230 ) representing the providing secreted proteins are useful for preventing, treating to small represent the farged AAD21230 (AAD21230 ) representing farged AAD2130 (AAD21230 ) representing the farged AAD2130 (AAD21230 ) representing the farged AAD2130 (AAD21230 ) representing farged AAD2130 (AAD21230 ) representing the farged AAD2130 (AAD2130 ) r

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2, Mismatches
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Skeiky Ermalsc Prophosibacterium acces polypeptides and nucleic acids useful for vaccinating against and diagnosing infections, especially aseful for treating acmo vulgaris : WPI; 2001 616774/71. N-PSDB; AAS59718. onneuve J, Zhang T, YMAY, Mitcham JL, Wang S, Jen S, Carter D; Wang SS, Rhatia A;

27373, 1069pp; English.

(CORI-)

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The present invention describes substantially purified human proteins (referred to as open reading frame, ORFX, where X is 1-11491 (see Table 1 in the specification) APN15762 to ABN27252 encode the human ORFX proteins given in ABP00010 to ABP11500. ORFX proteins are useful for treating or preventing a pathology associated with an ORFX-associated disorder in humans, and in the manufacture of a medicament for treating a syndrome associated with ABPX associated disorder. ORFX polynucleotide sequences can be used in gene therapy ORFX sequences can be used in the reatment of cancer, hyperproliferative disorders, cirrhosis of liver, psoriasis, benign tumours, keloid, degenerative disorders, haemorrhage, osteoarthritis, neurodegenerative disorders, disorders related to organ transplantation, cardiovascular disease, diabetes mellitus, systemic truncate disease, various immune deficiencies and disorders, infectious diseases, autoimmune disorders such as multiple sclerosis, rheumatoid arthritis, autoimmune thyroiditis, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. ORFX proteins are also useful for treating burns, incisions, ulcers, for treating osteoporosis,
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the treatment,
                                                                                                                                                                   P. acnes. The pustulosis, P. acnes is
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N-PSDB;
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N.B. The sequence data for this patent did not form part of the property of the process of th
sample with a binding agent that binds to the proteins of the invent and determining the amount of bound protein in the sample. The polypeptides may be used as antigens in the production of antibodies specific for P acres proteins. These antibodies can be used to
                                                                                                                                                                                                                                                                                                                                                                          vaccinating a treating acne
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L'maisomneuve
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                                                                    he disorders include SAFHO syndrome (synovitis, acne, hypertosis and osteomyelitis), uveitis and endophthalmitis. also involved in infections of bone, joints and the central tem, however it is particularly involved in the inflammatory octated with acre vulgaris. A method for detecting the absence of P acres in a patient comprises contacting a a binding agent that binds to the proteins of the invention
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2000US-208841P.
2000US-216747P.
                                                                                                                                                                                                              Relos-AAU68017 represent Propionibacterium aches immunogeric. The proteins and their associated DNA sequences are used in prevention and diagnosis of medical conditions caused by a disorders include SAFHO syndrome (synovitis, ache,
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J, Zhang Y,
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Note: The requested into the forether lides of the foreby for specification, but was obtained in electronic format directly free at ftp.wipo.int/pub/published_pot_sequences.
AAU14602-AAU14794 represent novel bone marrow polypeptides of the invention. The proteins and corresponding moding sequences may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate home marrow polypeptide expression. For example, to treat disorders associated with decreaced expression by rectifying mutations or deletions in a patient's genome that affect the activity of the polypeptides by expressing inactive proteins or to supplement the patient's own produce the proteins or to supplement the pacids may be used to produce the polypeptides, by inserting the nucleic acids into a host cell and culturing the cell to express the protein. The nucleic acid assays to detent and quantitate the presence of similar nucleic acid sequences in samples, and therefore which patients
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N-PSDB;
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20-JUN 2000: 2000US-0598075.
19-JUL-2000: 2000US-0620325.
30-NOV 2000: 2000US-0250683.
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A;Accession: A71020
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A,Residues: 1-241 < YAW>
A,Cross-references: GB-AF50300F, NIT GREACITE, FIII BAATTER, I, FII JEI 1878
A;Experimental source: strain OT3
A,Note, this accession replaces an interim accession for a sequence replaced by GenBank C;Genetics:
A;Gene: PH1454

hypothetical protein PH1454 - Pyrococus horikoshii C;Species: Pyrococcus horikoshii C;Species: Pyrococcus horikoshii C;Cate 14-Aug-1996 #sequence\_revision 14 Aug-1996 #text\_-bauge 20 Jun 2006 C;Accession: A71020 C;Accession: A71020 C;Eawarabayasi, Y., Sawada, M., Hulikawa, H., Hulikawa, Y., Hinu, Y., Yununutu, O., Okkine R,Eawarabayasi, Y., Sunahashi, T., Tanaka, T., Kudoh, Y., Yamazaki, Y., Kushida, N., Oquohi, DNA Res. 5, 55-76, 1998 
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A;Residues: 1-358
A;Cross-reference
C;Genetics:
A;Gene: CC0378
                                                        A;Status: preliminar
A;Molecule type: DNA
A;Residues: 1-386 <KI
A;Cross-references: (
C;Genetics:
A;Gene: AGR
A;Map p.siti
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C;Sute: lu-Eup-lu-M #Eugs-Eup-lu-Vision in Sep-1779 #FFAT_Cha
C;Sute: lu-Eup-lu-M #Eugs-Eup-lu-Vision in Sep-1779 #FFAT_Cha
C;Accession: $43876
A;Reference number: $43876; MUID: 94118303; EMID: 8289276
A;Residues: l-358 <ZWE>
A;Residues: 1-358 <ZWE>
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CyBute: 30 sep 2001 #sequence_revision 50-Sep-2001 #text_change IT May-2002
CyAccession: A97456
RyGoodner, B.; Hinkle, G.; Gattung, S.; Miller, N.; Blanchard, M.; Qurollo, A.; Liu, S.; Wollam, C.; Allinger, M.; Scutt, D.; Soutt, C.; Dappas, C.;
Cytore 204, CyC. 2001
Cytore 204, CyC. 2001
AyKeference number: A97359, EMID.11743194
AyKeference number: A97359, EMID.11743194
AyStatus: preliminary
AyMolecule type. nwa
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A87296
C;Species Caulobacter crescentus
C;Species 20-Apr-2001 #sequencu_revision 20 Apr-2001 #text_change 17
C;Accession: A87296
C;Accession: A87296
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A; Title: Complete Genome Sequence of Caulobacter crescentus.
A; Reference number. A87249, MUID.21173698; PMID:11259647
A; Accession: A87296
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A,CLOSS references: EMBL.U01031, WID.y303011, FIDN.AAM18013.1; PID:g393012
C,Ouperfamily site of a Mfile DMA-mathyltroceformse (adenine-specific) HpaI
C,Feywords muthyltroceformse, restriction modification cystem
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C,Superfamily: p
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le type: DNA
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End. Mo. 1.3e+02;
Mirrat har 6.
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                                                           PID:g15155772; GSPDB:GNCC
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C;Accession: D90105
R;Douglas, S; Zauner, S; Fr
Nature 410, 1091-1096, 2001
A;Title: The highly reduced g
A;Reference number Assocs; M
A;Accession: D90105
                                                                                                           A; Cross referent
C; Genetics:
A; Map position:
A; Genome: nucleo
C; Keywords: nucl
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C;Date: 11:Jan-2002 #sequence_revision 11
C;Accession: AD2674
R;Wood, D.W.; Setubal -
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A;Status: preliminary
A;Status: preliminary
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-386 <KUR>
A;Cross-reference: CP·AEccess; E
A;Cross-reference: CP·AEccess; E
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A; Authors: Yoo, H.; Tao, Y.; Pidd
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C; Superfamily:
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A;Molecule type. DNA
A;Residues: 1-394 <DOU>
A;Cross references GR
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PTS system galactitel-specific enzyme ITC component homolog lin2814 (import C;Species: Listeria innocua
C;Date 27-Nov-2001 #sequence_revision 27 Nov 2001 #text_change 14-Dec-2001
C;Accession: AH1783
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A;Status: preiimi...
A;Molecule type: Di
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A;Residues: 1-403 ×KUR>
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C;Species: Brucel
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A; Map position: I
C; Superfamily: site
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R;DelVerchio, V.G.; Kapatial, V.; Redkar, R.J.; Patia, G.; Mujer, C.; Los, T.; Ivanova, t., Mazur, M.; Goltsman, E.; Selkov, E.; Elzor, F.H.; Hagius, C.; Crallaghan, D.; Lotrosc Natl. Acad. Sci. U.S.A. 99, 443-448, 2002
A,Title. The genome sequence of the facultative intracellular pathogen Brucella melitens. A,Reference number: AD3252, PMID 11756688
A,Accession: AF3432
A,Accession: AF3432
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A, Authors (Freft,
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T., Simnes, N., Tierrez, A., Vazguez Boland,
e genomics of Listeria species.
Abl077, MUID 215/02/9, FMID 1167/669
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Se: strain_EGD-e
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itol-specific enzyme IIC component homolog lin2814 (imported)

F.; Berche, P; Entian, K.D.

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RyGlaser, P.; Frangeul, D.; Buchrieser, C.; Amend, A.; Baquero, F.; B.; Dominguez-Bernal, G.; Euchaud, E.; Durand, D.; Dussurget, O.; Enti D.; Jones, L.M.; Karst, U.
Science I34, 849-805, ICO1
A, Buthris. Ereft, J.; Eulin, M.; Kunst, F.; Kurapkat, G.; Maduen, E.; Ce, C.; Schluster, T.; Simoud, N.; Tierrez, A.; Varquer Beland, J.A.; A; Title: Comparative genemics of Disteria species.
A) Reference Comparative genemics of Disteria species.
A) Reference Transport DNA
A; Status: preliminary
A, Molecule type: DNA
A; Residues: 1-423 cGLA>
A; Experimental source: Strain Clip11262
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Omega-6 decaturase, chloroplact ccybean

C; Species: Glycino max (ccybean)

C; Date: 14-May-1999 #sequence_levision 14-May

C; Accession: TO7742

R; Hitz, W.D.; Carlson, T.T.; Booth, T.P.; Kin

Plant Physiol. 105, 635-641, 1994

A; Title Cloning of a Figher plant plactid on

A; Reference number: Z16109; MUID: 94345008; PM

A; Accession: TC7742

A; Status. proliminary, translated from GP, FMB

A; Residues: 1-424 < HIT>

A; Cross references: EMBI::129215; NID: 3459961;
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## ALIGNMENTS

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Makayana S., Matomoto M., Matono A., Mulaki A., Makayana S.,
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Makayana M., Waruo F., Oberna S., Chinga S., de la Bastide M.,
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Malakerran M., Matonaey E., Ozersky P., Piley A., Strowmatt C.,
Malgoer M., Meyer R., Mulvaney E., Ozersky P., Piley A., Strowmatt C.,
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CHARACTERIZATION, AND MUTAGENESIS.
MEDLINE=98038777; PubMed=9372940;
Gautier T , R-1ges T , Tollervey D , Hurt E ;
"Mucleolar FFE/D tep-ut prothics Digital and Digital Digita
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V-SA: REDUCED GROWTH RATE AT ALL

TEMPERATURES; WHEN ASSOCIATED WITH R.

Y >0: AT 3? DEGREE; GROWTH SLOWE AF

TO 8 HOURS AND CELL DIVISION STOPS AN

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M-SR: REDUCED GROWTH RATE AT ALL

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OPS_CONTROLS (Sel. 40, Created)

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Homo sapiens (Human).

SELEARY 11A, Metazia, Chirdata, Cranfata, Vertebrata, Futcleost

Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

NOSI_Talid=9606;

NOSI_Talid=PROM_N.A.

NOPSOURCE FROM_N.A.
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Lyman S.K., Gerace L.;

"Clening and characterization of MOSS/MORDS.";

Ellnitied (TAU 1993) to the EMPT/Selfelle, TIEC data

[2]

SEQUENCE FROM M.A.

MEDLINE-20384617, FubMed-10925205;

Melson S.A., Cantera M.E., Isrochelle W.J.;

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Wiemann S.;
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d characterization of NOSS/NOSSB.";

int 19:31 to the PMR1/SolButh/IISC databases
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fig. Mismatches (
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Q9QZ86; O88525;

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COMPLICT
This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://
                                                                                                                                                                                                                                                                                                                                                                                                   [1] TOO NOTE FROM W.A. FROMENCE OF 1.25, AND INTERA-MEDLINE=20143579; PubMed=10679015;
Yang Y., Isaac C., Wang C., Dragon F., Pogacic V. Ponserved composition of mammalian box H/ACA and nucleolar ribonucleoprotein particles and their common factor Noppl40.";
Mol Biol Cell 11.567-577/20001
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; I
Mammalia: Eutheria: Rodentia; Sciurognathi; Muridae;
NCBI_TaxID-10116;
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Submitted (JIN-1998) to the
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SUBURINIT Interacts with Nolc1/Nopp140.
SUBCELLULAR LOCATION Nuclear, nucleolar.
SIMILARITY: BELONGS TO THE NOF5/NOF56 FAMILY.
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AL117554; CAR55989 1; -

AF161469; AAF29084.1; -

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LTYCYCLOVYCOPFNYACAF - 1

CQ (IN REF. 4).

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### ALIGNMENTS

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Q9CLS4;
01-JUN-2001 (
01-MAR-2002 (
Hypothetical
PM1135.
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EMBL; AE006154; AAK03219.1; -.

Interpro; IPP001647; HTH_TetR.

Pfam; PF00440; tetR; 1.

PRINTS, PE00455, HTHTETR.

DNA-binding, Hypothetical protein, Transcription regulation; Complete proteome.

SEQUENCE 197 AA; 22325 MW, 28E3E3E5E5141115F CR064;
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Bacteria; Proteobacteria; gamma subdivision; Pasteurellaceae;
Pasteurella.
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larity 66.7%;
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protein PM1135.
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                                                                                                                 Pred. Mo. 1.60+02;
2, Mismatches 0, Indelo
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10 096NOD
11 01-DEC-2001 (Tremberel 19, Created)
12 01-DEC-2001 (Tremberel 19, Last sequence update)
13 01-DEC-2001 (Tremberel 19, Last sequence update)
14 01-DEC-2001 (Tremberel 19, Last sequence update)
15 01-DEC-2001 (Tremberel 19, Last sequence update)
16 01-DEC-2001 (Tremberel 19, Last semostation update)
17 01-DEC-2001 (Tremberel 19, Last semostation update)
18 01-DEC-2001 (Tremberel 19, Last semostation update)
19 01-DEC-2001 (Tremberel 19, Last se
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C Q9C6CO; (TrEMBLrel. 17, Created)

T 01-JUN-2001 (TrEMBLrel. 17, Lubt Sequence update)

C CHeega 6 reductase (Fragment).

RAD6.

N FAD6.

S Arabidopsis thaliana (Mouse-ear cress).

C Eukar; 11, 71: Aliana (Mouse-ear cress).

S Exabidopsis thaliana (Mouse-ear cress).

C Eukar; 11, 71: Aliana (Mouse-ear cress).

C Eukar; 11, 71: Aliana (Mouse-ear cress).

C Eukar; 11, 71: Aliana (Mouse-ear cress).

N C Eukar; 11, 71: Aliana (Mouse-ear cress).

N C Eukar; 11
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PARTITION W., Electron M.A.

Figer W., Brunel D.;

ET "Amplified consensus gene markers. Tools designing for a genetic map

"E Arabid-pais Known finition gener in Elabsica.";

EL Mitted (TAN 1900) for the Empty/Genpank/PPPT databases.

EMBL; Ab229390; AAKO0662.1;

FE Thirtiping, FF100487; FA_desaturase;

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NE Omega 6 reductase (rraymon)

NE Omega 6 reductase (rraymon)

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Brand-BR-1.

Brand-BR-1.

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Entaryota Jampestris (Field mustard).

Converse dampestris (Field mustard).

Converse dampestris (Field mustard).

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C. CORNOS (TrEMBurel. 17, Dast sequence update)

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C. CORNOS (Pape).

C. CORNOS (Pape).

C. Eukaryota, Viridiplantae, Ctroptophyta, Embryophyta, Trocheophyta;

C. Eukaryota, Viridiplantae, Ctroptophyta, Embryophyta, Trocheophyta;

C. Cornestos II; Brassicales, Brassicaceae, Brassica.

X. M. C. CORNES (Pape).

R. CORNES (Pape).
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larity 66.7%, Fred. No. 1.7e+02;
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Q9AXY2
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                                P SEQUENCE FROM N.A.

P SEQUENCE FROM N.A.

A Yamada K , Liu S X . Sakano H , Pham P K , Ranh J , Ching M K , A Goldsmith A D , Lee J.M . Quach H L , Tang C C , Toriumi M , Yu G., A Goldsmith A D , Lee J.M . Quach H L , Tang C C , Toriumi M , Yu G., A Gones T., Kamiya A . Karlin-Neumann G , Kawai J , Yim C , Yosema E , Lam B . Lin J , Meyers M C , Miranda M , Marusaka M , Yim C , Yosema E , Palm C J , Sakurai T , Satou M , Seki M , Shinn P., Southwick A., Shinnzaki E., Davis R.W., Ecker J.R., Theologis A., Suthmitted (APP 2001) to the EMEL/GenBack/CDRJ ditition Tool ";

Submitted (APP 2001) to the EMPL/GenBack/CDRJ ditities

CC -!- SIMILARITY CONTAINS 1 WD PEPEAT (TEP-ASP DOMAIN)

DR TIGREAMS; TIGR01198; pgl; 1.
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STRAIN-CV. STELLAR;

Fourmann M., Froger N., Brunel D.;

"Amplified consonsus gone markers Tools designing for a C "Amplified consonsus gone markers Tools designing for a C of Arabidopsis-known-function genes in Bransica.";

Submitted (JAN-2000) to the FMBL/GenBank/DDBJ databases.

Submitted (JAN-2000) to the FMBL/GenBank/DDBJ databases.

REMBL; AF229391; AAF00663 1;

R InterPro; IPR001225; FA_desaturase.

R Pfam; PF00487; FA_desaturase; 1.

R ProDom, FD001081. FA_desaturase; 2
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Q9AXY2;
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01-JUN-2001 (TrEMBLrel. 17, Cre
01-JUN-2001 (TrEMBLrel. 17, Las
01-JUN-2002 (TrEMPLrel. 21, Las
0mega 6 reductase (Fragment).
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Q94K47;
Q94K47;
Q94K47;
Q1-DEC-2001 (TrEMBLrel. 19, Created)
Q1-DEC-2001 (TrEMBLrel. 19, Last sequence update)
Q1-JIN 2002 (TrEMBLrel. 19, Last sequence update)
Q1-JIN 2002 (TrEMBLrel. 21, Last annotation update)
Q1-JIN 2002 (TrEMBLrel. 21, Last annotation update)
Q1-JIN 2002 (TrEMBLrel. 21, Last sequence update)
Q1-JIN 2002 (TrEMBLrel. 19, Created)
Q1-JIN 2002 (TrEMBLrel. 19, Last sequence update)
Q1-JIN 2002 (TrEMBLrel. 19, Last s
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Fukaryota: Viridiplantae: etroptophyta: Embryophyta: Tracheophyta
Spermarophyta: Magnoliophyta: oudicotylodons, core eudicots, Rosi-
eurosids II; Brassicales: Brassicaceae: Brassica.
NCBI_TaxID 3708:
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154 WVWHEF
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P SEQUENCE FROM N.A.

Cole S.T., Brosch R., Parkhill J., Garnier T., Churcher C., Harris D.,

A Cole S.T., Brosch R., Parkhill J., Garry C.E. III, Tekaia F.,

A Gordon S.V., Eiglmeier K., Gas S., Barry C.E. III, Tekaia F.,

A Gordon S.V., Eiglmeier K., Gas S., Barry C.E. III, Tekaia F.,

A Fadrock F., Pasham D., Prown T., Chillingwirth T., Tekaia F.,

B Fadrock F., Sevin K., Foltwell T., Gentles S., Hamlin M., Holroyd S.,

A Hornsby T., Jagels F., Frogh A., McLean J., Morles S., Morphy L.,

Oliver S., Osborne J., Quail M.A., Rajandream M.A., Rogers J.,

A Hornsby T., Seeger F., Skelton S., Squares S., Squares R.,

Sulsten J.E., Taylor E., Whitehead S., Barrell B.G.,

"Deciphering the biology of Mycobacterium tuberculosis from the complete genome sequence.";
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Prassica oleracea Eukaryota; Viridip: Spermatophyta; Magreurosids II; Brass: NCBI_TaxID=3712;
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01-JUN-1998
01-MAF 2002
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RV0059 OR MTV030 02 OR MT0065.
Mycobacterium tuberculosis.
Barteria, Firmicutes; Actinobacteria, Actinobacteridae
Actinomycetales, Cirynebacterineae, Mycobacteriaceae,
NCBI_TaxID-1773,
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Fourmann M., Froger N., Brunel D.;
"Amplified consensus yene markers. Tools designing for a of Arabidopsis-known-function genes in Brassica.";
of Arabidopsis-known-function genes in Brassica.";
submitted (JAN 2000) to the EMRL/GenHank/55PPJ dutabases.
EMPL; AF209389; AAK00661 1; -.
InterFro, IFP001225, FA_desaturase.
Pfam; PF00487, FA_desaturase; 1.
ProDom; PD001081; FA_desaturase; 2.
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66 7%; Pred No 1 8e+02;
ive 2; Mismatches 0; Indels
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N Company Furyarrhaecta, Thermococci, Thermococcales, Thermococcas.

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m L.A., Ermolaeva M.D.,
n J., Khouri H., Gill J
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Tabata S.;

"Structural analysis of Arabidopsis thallana chromesome 5 VI Sequence features of the regions of 1,081,058 kp covered k, and TAC clones.";

Tybysically assigned F1 and TAC clones.";

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R EMBL; AB016884; BAB11233.1; -.

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k Ifam, if 01182, Glucosamine iso;

I TICRFAMS; TICR01198; pgl; 1.

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***Property Ticr AA, TRARA MW; TIFT046ECFFCTTAP CRC64;
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MA1162.

Methanosarcina acetivorans.

Archaea; Euryarchaeota; Methanosarcinaceae; Methanosarcinaceae; Methanosarcina.

( NCBI_TaxID-2214; [1]

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X MEDLINE 21929760; PubMed 11932238;
X MEDLINE 21929760; PubMed 1193223 M.G., Atmoor D., Brown A.,
X Allen M., Calvo S., Engols P., Smirnov S., Atmoor D., Brown A.,
X Allen M., Naylor J., Crange-Thomans M., Exarellade F., Zohnson R.,
X Linton L., McEwan P., McKernan K., Talamas J., Tirrell A., Yo W.,
X Linton L., McEwan P., McKernan K., Talamas J., Tirrell A., Yo W.,
X Linton L., McEwan P., McKernan R., Graham D.E., Grahame D.A., Guss A.M.,
X Linton L., McEwan P., McKernan E., Grahame D.A., Guss A.M.,
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QBTRL3;
Q1-JUN 2002
01-JUN 2002
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Q91065;
Ol-MAR-2001 (TrEMBLrel. 16, Created)
Ol-MAR-2001 (TrEMBLrel. 16, Last sequence update)
Ol-JUN-2002 (TrEMBLrel. 21, Last annotation update)
Hypothetical protein PA2778.
PA2778.
Pseudomonas aeruginosa.
Bacteria, Proteobacteria; gamma subdivision; Pseudomonadaceae;
Pseudomonas.
NCBI_TaxID=287;
SEQUENCE FROM N.A.

STRAIN=ATCC 15692 / PAO1;

MEDLINE=20437337; PubMed:10984043;

Stover C.K., Pham X.-Q T., Erwin A.L., Mizoguchi S.D., Warrener P., Hickey M.J., Brinkman F.S.L., Hufnagle W.O., Fowalik D.J., Lagrou M. Garber R.L., Golfry L., Tolentino E., Westbrock-Wadman S., Yuan Y., Brody L.L., Coulter S.N., Folger K.B., Kas A., Larbig K., Lim R.M., Smith K.A., Spencer D.H., Wong G.K.-S., Wu Z., Paulsen I.T., Reizer J., Saier M.H., Hancock P.E.W., Lory S., Olson M.V.;

"Complete genome sequence of Pseudomonas aeruginosa PAO1, an opportunistic pathogen.";

Nature 406:959-964(2000).
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K MEDLINE Disipy79, FubMed 11316371,

K MEDLINE Disipy1979, FubMed 11316371,

K MEDLINE Disipy1979, FubMed 11316371,

K MEDLINE Disipy1979, FubMed 11316371,

K Saklani - Jusforgues H., Fontan E., Goossens P.L.;

T "Characterisation of a Listeria menocytogenes mutant deficient in arabitol fermentation.",

T arabitol fermentation.",

Res. Microbiol. 152:175-177(2001).

Res. Microbiol. 152:175-177(2001).

Res. Microbiol. 152:175-177(2001).

RembL; AJ292552; CAC20641.1; -.

FINEL; AJ292552; CAC20641.1; -.

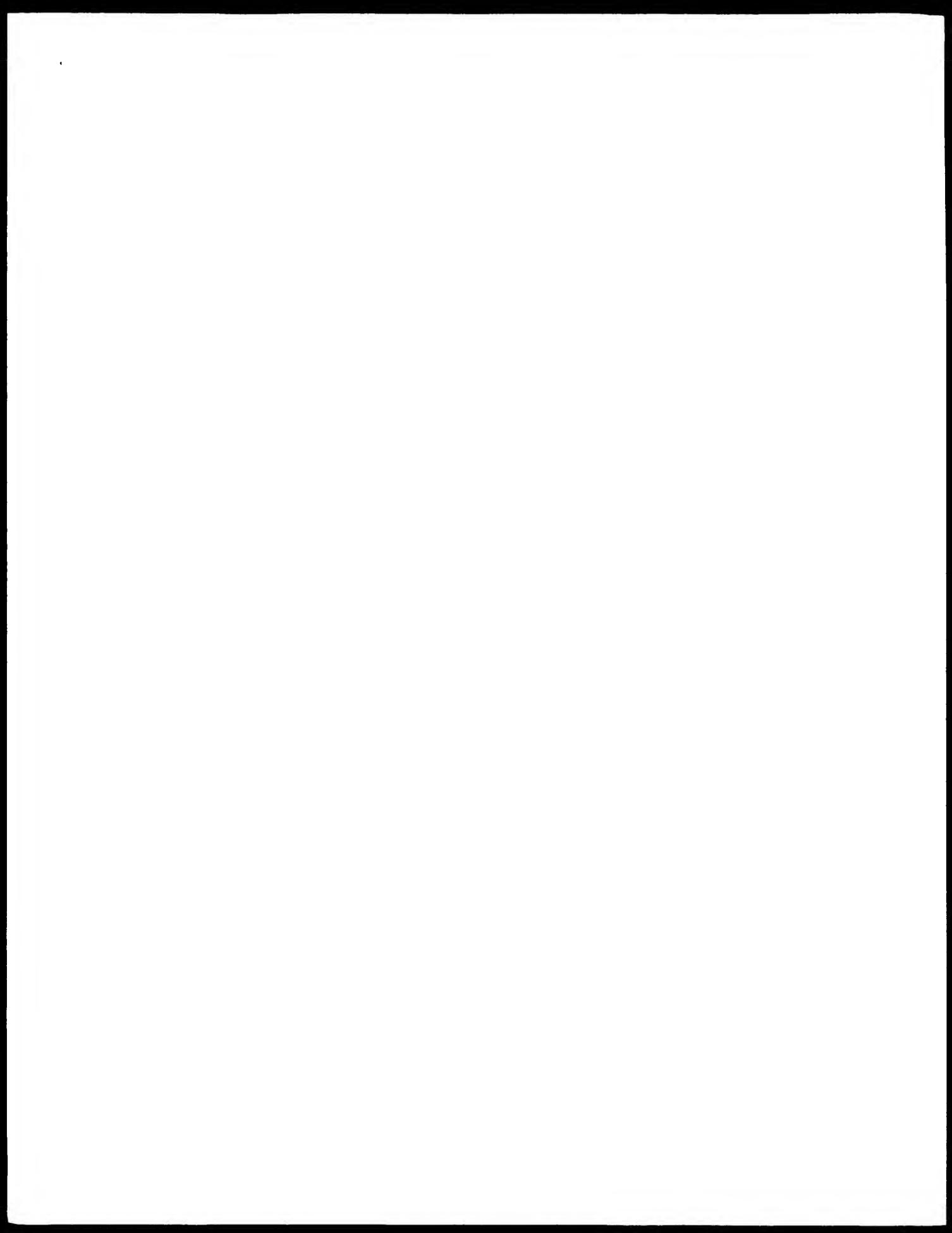
FINEL; AJ292552; CAC20641.1; -.

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01 MAR-2001 (TrEMBLrel. 16, Last sequence update)
01 JUN-2002 (TrEMBLrel. 21, Last annotation update)
Putative phosphotransferase D-arabitol specific component IIC
(Fragment).
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InterPro; IPP005074; Peptidase_C39
InterPro; IPR001440; TPR.
Pfam; PF03412; Peptidase_C39; 1.
Hypothetical protein; Complete proteome.
SEQUENCE 293 AA, 32016 MW; 06A41010EEDF60DE1 CPC64;
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Bacteria, Firmicutes, Pacilluc/Clustridium
Listeriaceae; Listeria.
MCBI_TaxID=1639;
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SUMMARIES

Result		Query				
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2	6	100.0	6	21	AAB01499	Peptide which bi
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                   Peptides which bind to the DNA binding domain of transcription factor E2F and inhibit cell cycle progression may be useful as research agents to investigate the interaction between E2F and DP-1 or the activation of transcription by E2F 1/2F 1 between E2F and DP-1 may all by word for inducity lighted and /1 well cycle arrows in a cell, particularly for treatment of cancer or other proliferative dispreters such as psoriasis and restenosis.
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Single
brains
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Note: The sequence data for this patent did not form part of the grinted specification, but was obtained in electronic final directly from WIPO at ftp wipo int/pub/published_pot_sequences.
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The present invention describes substantially purified human proteins (referred to as open reading frame, ORFX, where X is 1-11491 (see Table 1 in the specification: APM15762 to AFW17252 Enough the Luman DRFX of in the specification: APM15762 to AFW17252 Enough the Luman DRFX C proteins griven in ABP00010 to AFW17252 Enough the Luman DRFX C proteins are useful for treating or preventing a pathology associated with an ORFX-associated disorder in humans, and in the manufacture of a medicament for treating a syndrome associated with OPFX-associated disorder OPFX polymuclectide syndrome associated with OPFX-associated disorders, cirrhosis of liver, psoriasis, benign tumours, keloid, degenerative disorders, haemorrhage, osteoarthritis, neurodegenerative disorders, disorders, haemorrhage, transplantation, cardiovascular diseases, diabetes mellitus, systemic transplantation, ardiovascular diseases, diabetes mellitus, systemic diseases, autoimmune disorders such as multiple sclerosis, rhoumatoid arthritis, autoimmune thyroiditis, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease, for treating osteoporosis, consecular incissions, ulcers, for treating osteoporosis,
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N-PSDB;
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29-AUG-2000;
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RESULT 14
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Best Local
Matches
Sequences AAHR9105-AAUGR017 represent Propionibacterium acmes immunogen: polypeptides. The proteins and their associated DNA sequences are used the treatment, prevention and diagnosis of medical conditions caused by P. acmes. The disorders include SAPHO syndrome (synovitis, acme, pustulosis, hypertosis and osteomyelitis), uvcitis and endophthalmitis. P. acmes is also involved in infections of bone, joints and the central nervous system, however it is particularly involved in the inflammatory lesions associated with acme vulgaris. A method for detecting the presence or absence of P. acmes in a patient comprises contacting a sample with a binding agent that binds to the proteins of the invention and determining the amount of bound protein in the sample. The polypeptides may be used as antigens in the production of antibodies specific for P. acmes proteins. These antibodies can be used to
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N-PSDB;
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L'mais:
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N.B. The sequence data for this patent did not form part of the printed
specification, but was obtained in electronic format directly from WIP
at ftp.wipo int/pub/published_pot_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SAPHO syndrame; synavitis; acne, pustulasis, bypertacis, sterm uveitis; andophthalmitis; bone; joint; central nervous system; inflammatory lesion, acne vulgaris, enryme linked immunosorbont dermatological; osteopathic; neuroprotectant.
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r regeneration and treatment of lung or liver fibrosis,
injury in various tissues and conditions resulting from
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N PSDB;
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AANTIAFOR AARTIATOA represent nowel bene marrow polypoptides of the invention. The proteins and corresponding ording sequences may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate bone nation performed expression. For example, to treat disorders associated with decreased expression by rectifying mutations or deletions in a partient's genome that affect the activity of the patient's own production of the polyperide additionally, the nucleic acids may be used to produce the polyperides, by inserting the nucleic acids into a host cell and culturing the cell to express the protein. The nucleic acid and incomplements y sequences may also be used as probes in diagnostic assays to detect and quantitate the presence of similar nucleic acid sequences in samples, and therefore which patients
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East Local Similarity 66.7%; Pred. No. 57;
Matches 4, Conservative 2, Mismatches 0, Indois 0; Gaps
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Qy 1 WXXWHF 6 |::||| Db 67 WLIWHF 72

Search completed: February 20, 2003, 11:26:32 Job time: 29.3333 secs

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Title:
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The invention relates to compounds comprising a peptide chain approximately a to the arthous solds in longer that brinds to graduately a to the arthous solds in longer that brinds to graduately approach to graduately a to the penetry (G-CSER). The compounds contain approach to sequence XV IXV DXV 3XV 4XV 5XV CXV CXV 9 (where XV I - E, C, C, V or 1; XV 2 - E, A, 1; M, E, V, L, G, D, C or 5; XV 6 = E or XV 4 - L, A or 3; AV 5 - E, A, M, H, E, V, L, G, D, C or 5; XV 6 = E or XV 4 - L, A or 3; AV 5 - E, A, M, H, E, V, L, G, D, C or 5; XV 6 = E or XV 4 - L, A or 3; AV 1 - E, A, M, H, E, V, L, G, D, C or 5; XV 6 = E or XV 4 - L, A or 3; AV 1 - E, A, M, H, E, V, L, G, D, C or 5; XV 6 = E or XV 5 - E, XV 7 - E, XV 8 - E, XV 
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                                            target binding ligards (TBLs), to identifying one or more TBLs; (b) screening a second library comprising second member ligands for the ability to inhibit the binding of one or more of the TBLs to the target protein, and so obtaining one or more inhibitory ligands; and (c) determining which of the inhibitory ligands can mediate a biological activity of the target protein. The present sequence represents a potential binding peptide for Haemophilus influence tyrosine tRNA synthetase from an example of the present invention. The method can be used for identifying drugs which can mediate the kinlegical activity of a target protein. It can be used to identify the biological activity of a target protein whose biological function is not known and perhaps cannot be determined directly. The method can also be used to identify new inhibitory ligands of specific target proteins. The method provides high throughput screens which are essentially identical for similar and dissimilar targets, bypassing the need to develop distinct acsays for biochemically diverse targets.
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